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MRC POLYMERS
SR/TECH

**SITE INVESTIGATION REPORT-FOCUSED &
REMEDIAL ACTION COMPLETION REPORT**

**MRC Polymers, Inc.
3307 S. Lawndale Avenue
Chicago, Illinois**

ORIGINAL

February 6, 2004

Prepared For:

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RELEASABLE

APR 20 2004

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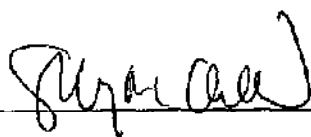
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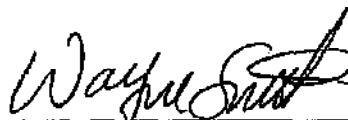
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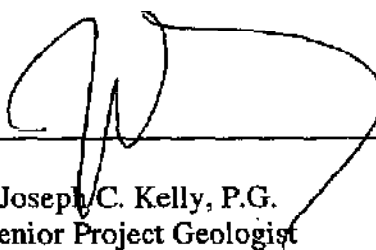
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02448B

Pioneer Project Number

February 6, 2004

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1.0 INTRODUCTION

1.1 Site Investigation Objectives

Pioneer Engineering & Environmental Services, Inc. (Pioneer) was engaged by MRC Polymers, Inc. (MRC), the client and Remediation Applicant (RA), to perform environmental consulting services at the subject property located at 3307 South Lawndale Avenue in Chicago (Cook County), Illinois (**Appendix A, Figure 1**). Original site activities included the completion of a Phase I Environmental Site Assessment (ESA) at the subject property. Subsequent activities included multiple phases of subsurface investigation, underground storage tank (UST) identification and removals, and Illinois EPA (IEPA) reporting in connection with the subject site's historical use as a foundry and plastics manufacturing facility. The purpose was to determine the environmental condition of the site, and evaluate the level of remedial action necessary to demonstrate compliance with the applicable state regulations and obtain a "focused" No Further Remediation (NFR) Letter from the IEPA pursuant to Title 35 IAC (Illinois Administrative Code) Part 740 Subpart F, and Section 58.10 of the Illinois Environmental Protection Act (the Act), specifically for the land bounded by the subject property borders (Remediation Area). The activities were voluntarily initiated in accordance with the regulations of 35 IAC Parts 740 and 742. The required State enrollment and review forms associated with this submittal are included in **Appendix B**.

1.2 Background Information

Pioneer was initially contracted to complete a Phase I ESA for the subject property during a potential property transaction. The Phase I ESA, dated July 5, 2002, indicated that the subject property was developed in the 1920s, and was occupied by a foundry (circa 1920s to 1950s), followed by a plastics manufacturer (circa 1950s to 1990s), and recently has been used for the

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formulation of specialty polymers by MRC (since approximately 1996). Additional historical information obtained in connection with the Phase I ESA identified the suspected current/historical presence of various UST systems on the subject site.

Based on the long time industrial use of the subject property and the suspected presence of UST systems on-site, Pioneer recommended that a subsurface investigation be conducted in order to evaluate the extent of impacts, if any, related to these recognized environmental conditions (RECs) identified in connection with the subject property. Pioneer identified the locations of four USTs on-site, and subsequently completed multiple phases of site investigation, and the abandonment/removals of all known USTs at the site.

The following *Site Investigation Report-Focused and Remedial Action Completion Report* (SIR/RACR) provides a complete discussion of the procedures and results of the subsurface investigations completed to date. As previously stated, Pioneer is pursuing a focused "No Further Remediation" letter from the Agency in accordance with the regulations set forth in 35 IAC Part 740, Subpart F and Section 58.10 of the Act for the identified RECs.

1.3 Recognized Environmental Conditions

As mentioned, based on the findings of Pioneer's prior Phase I ESA, the following recognized environmental conditions (RECs) were identified in connection with the subject property.

- The presence of one 10,000-gallon fuel oil UST, recorded on a June 29, 1959, Chicago Department of Environment (CDOE) building department *installation permit* and observed in-place adjacent to the site's former boiler room.
- The presence of one 2,000-gallon naphtha UST, recorded on an October 25, 1967, CDOE building department *inspection permit* and observed in-place southwest of the site's storage/manufacturing building.

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- The presence of one 15,000-gallon methanol UST, recorded on a April 4, 1973, CDOE building department *installation permit* and observed in-place north of the site's storage/manufacturing building.
- The presence of a 260-gallon gasoline UST shown on the northwest portion of the site on a 1951 Sanborn Fire Insurance Map and observed in-place.
- The former presence of a 6,000-gallon "alcohol/S.S." UST, "inspected" January 24, 1967, and "removed" April 26, 1983, from an unknown on-site location, recorded on CDOE building department permits.
- The presence of various piping/equipment potentially related to UST systems observed in various locations of the site.
- The long-time use of the subject property for industrial operations, including a foundry and plastics manufacturer.

Given the information gathered in connection with the Phase I ESA, these RECs served as the focus of the site characterization work conducted at the subject property by Pioneer.

1.4 Contaminants of Concern

Based on the nature of the RECs and potential associated contaminants, soil samples collected during the investigation were analyzed for a combination of VOCs (volatile organic compounds), BTEX (benzene, toluene, ethylbenzene, and total xylenes), PNAs (polynuclear aromatic hydrocarbons), SVOCs (semivolatile organic compounds – acid extractables and base/neutrals), methanol, and total/TCLP/SPLP RCRA metals with pH.

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2.0 SITE CHARACTERIZATION

2.1 Site Description

The subject property consists of an irregular-shaped, 4.5-acre parcel (Figure 1) that is improved by a partial two-story office and manufacturing building (25,000 square feet) an interconnected partial two-story storage building (40,000 square feet), and a one-story maintenance building (6,000 square feet). The remainder of the subject property consists of concrete or asphalt-paved parking lots, driveways, and walkways. Recessed delivery docks are located on the northeastern and southwestern portions of the site, and bulk storage areas, including polymer silos situated upon concrete pads, are located north and south of the subject building. An area of sparse-vegetation is located along the north and east sides of the maintenance building.

As previously discussed, the subject property was developed in the 1920s. Since that time, the subject property has been utilized as a foundry and plastics manufacturer. The subject property is located in an industrial/commercial area of Chicago. The following provides a summary of the adjacent properties noted during the recent site inspection.

North: The subject property is bordered to the north by a railroad easement, followed by a commercial trailer storage yard occupied by Angel Yard.

East: The subject property is bordered to the east by a railroad easement, followed by a triangular parcel of vacant, undeveloped land.

South: The subject property is bordered to the south by an industrial/commercial property occupied by G & S Trailer Repair.

West: The subject property is bound to the west by Lawndale Avenue, followed by industrial/commercial properties, including Cortez Auto Body and Mariguas Body Shop, and a vacant lot that is currently being used for storage.

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2.2 Sampling Plan

Based on the RECs and the layout of the subject property, Pioneer developed a sampling plan designed to characterize the site conditions and achieve the project objectives in accordance with the Part 740 and Part 742 regulations. The soil investigation activities were conducted to investigate the known areas of concern (AOCs), delineate the lateral and vertical extent of contamination where possible, and provide supplemental information to satisfy the specific requirements of TACO. These activities included the advancement of 32 soil borings, with samples analyzed from various intervals in each boring for both physical and chemical parameters. The sampling plan is summarized in the Table 2.2. In addition, during the UST closure activities, Pioneer's sampling plan included analyses for the COCs specifically identified in Section 732.310, or the particular chemical when the tank contained a specific substance (i.e., methanol) in order to satisfy the applicable 41 IAC Part 170 regulations.

2.3 UST Identification Services

On August 15, 2002, Pioneer mobilized subsurface probing equipment, magnetic survey equipment, and OSHA-certified personnel to the subject property to conduct initial UST identification services. In conjunction with these assessment activities, Pioneer utilized a magnetometer equipped with pipe-tracing equipment to investigate the suspect UST locations to determine whether USTs were currently present on the site. The magnetic locator was used to scan suspect areas in a grid pattern, and identify magnetic anomalies.

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Table 2.2
Summary of Sampling Plan
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Location Identification	Total Depth (feet)	Interval Analyzed (feet)	Analyses	Investigation Purpose
B-1	1.5	NA	NA	Current/Historical Gasoline UST
B-2	15	6-9	BTEX	Current/Historical Gasoline UST
B-3	12	6-9	BTEX	Current/Historical Gasoline UST
B-4	12	NA	NA	Current/Historical Gasoline UST
B-5	15	9-12	VOCs, PNAs, Metals, pH	General Coverage / Historical use concerns
B-6	12	6-9	Methanol	Current/Historical Methanol UST
B-7	12	6-9	Methanol	Current/Historical Methanol UST
B-8	15	9-12	BTEX, PNAs	Current/Historical Fuel Oil UST
B-9	12	9-12	VOC	Current/Historical Methanol UST
B-10	12	0-3	VOCs	General Coverage / Historical use concerns
		6-9	BTEX, PNAs	Current/Historical Fuel Oil UST
B-11	12	3-6	BTEX, PNAs	Current/Historical Fuel Oil UST
B-12	12	9-12	PNAs	Potential REC
B-13	12	6-9	VOCs, PNAs, Metals, pH	General Coverage / Historical use concerns
B-14	2	NA	NA	General Coverage / Historical use concerns
B-15	9	0-3	VOCs, PNAs, Metals	General Coverage / Historical use concerns
B-16	12	0-3	VOCs, PNAs, Metals	General Coverage / Historical use concerns
B-17	12	0-3	VOCs, PNAs, Metals	Current/Historical Naphtha UST
B-18	12	6-9	VOCs, PNAs	Current/Historical Naphtha UST
B-19	4	NA	NA	Current/Historical Naphtha UST
B-20	12	6-9	VOCs, Base/Neutrals, Acids	Current/Historical Naphtha UST
B-21	12	6-9	PNAs, Metals	General Coverage / Historical use concerns
B-22	15	3-6	VOCs, PNAs, Metals, pH	General Coverage / Historical use concerns
B-23	12	6-9	PNAs, Metals, pH, TOC	COC Delineation / Historical use concerns
B-24	12	6-9	PNAs, Metals, pH	COC Delineation / Historical use concerns
B-25	6	3-6	PNAs, Metals, pH	COC Delineation / Historical use concerns
B-26	3	0-3	PNAs, Metals, pH	COC Delineation / Historical use concerns
B-27	6	3-6	PNAs, Metals, pH	COC Delineation / Historical use concerns
B-28	12	3-6	PNAs, Metals, pH	COC Delineation / Historical use concerns
B-29	9	3-6	PNAs, Metals, pH	COC Delineation / Historical use concerns
B-30	12	0-3	PNAs, Metals, pH	COC Delineation / Historical use concerns
B-31	12	0-3	PNAs, Metals, pH	COC Delineation / Historical use concerns
B-32	12	0-3	PNAs, Metals, pH	COC Delineation / Historical use concerns

Notes: BTEX = Benzene, ethylbenzene, toluene and xylenes (Method 8260/5035)
PNAs = Polynuclear Aromatic Hydrocarbons (Method 3550/8270)
VOCs = Volatile organic compounds (Method 8260/5035)
Base/Neutrals = Method 3550/8270
Acids = Acid compounds (Method 3550/8270)
Metals = Total RCRA 8 Metals (Method 6010/7471)
TOC = Total Organic Carbon (Method D2974-87)
NA = No sample collected and/or sample not analyzed

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A cable locator was also utilized to trace the position of existing suspected UST piping. In instances where tanks were suspected to be present, Pioneer advanced soil probes to aid in identifying the location, size, and orientation of the tanks. In areas where only piping was present, Pioneer traced the piping with the locator (when possible) and removed sections of concrete to verify its location and orientation. Since there was no physical evidence of a UST in the northwestern portion of the site, where a gasoline UST was shown on a historical Sanborn Fire Insurance Map, Pioneer utilized conventional excavating equipment to visually identify the presence of this UST. Other areas were also excavated to confirm the assumptions regarding the contents and capacities of the remaining USTs identified at the subject site.

Through these activities, Pioneer confirmed the presence of all of the on-site USTs for which records were available (one 15,000-gallon methanol UST, one 10,000-gallon fuel oil UST, one 2,000-gallon naphtha UST, and one 250-gallon gasoline as identified in Figures 1 & 2). No other USTs were identified through these invasive activities conducted at the subject site. Given the available information and practical considerations, there is no evidence of additional USTs at the site.

2.4 Soil Boring Advancement/Sampling

Pioneer mobilized subsurface drilling equipment and OSHA-certified personnel to the subject site and advanced soil borings on September 10th, September 12th, and October 15, 2002. In connection with the subsurface investigation work, Pioneer performed the following activities.

- Advanced a total of 32 soil borings throughout the subject property (**Figure 1**) in locations chosen to provide the greatest likelihood of detecting impacts from UST systems and historical site operations.

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- Advanced soil borings to depths ranging to 15 feet below surface grade (BSG), based on site-specific conditions, with samples collected continuously across the sampling intervals.
- Obtained soil samples using a truck-mounted, combination hydraulic percussive/auger soil sampling drill rig equipped with a 2-inch stainless steel barrel sampler and PVC sleeves, or using a 1-inch manual percussive Geoprobe™ soil sampling device, in accordance with the industry standard ASTM D1586 and generally-accepted engineering practices.
- Logged soil samples according to their predominant geologic characteristics and divided samples into two representative portions, for either field screening, or laboratory analyses.
- Field screened soil samples from each sampling interval after allowing the sample portions to equilibrate to the surrounding air temperature using a Photovac MicroFID™ IS-3000 hand-held air monitor/flame ionization detector (FID) to measure for indications of possible contamination.
- Selected samples from various soil boring intervals and locations for laboratory analysis, based on the scope of work, FID readings, and judgment of the Project Manager.
- Packed measured portions of each sample (between 5 grams and 4 ounces) in the field into pre-labeled, preserved (in accordance with Method 5035 where VOCs were analyzed), laboratory-provided glass containers, which were designated for possible analysis and stored in a cooler on ice under standard chain of custody procedures, and shipped overnight to an independent laboratory under standard chain-of-custody procedures.
- Submitted samples for analysis of a combination of BETX (benzene, ethylbenzene, toluene and xylenes), PNAs (polynuclear aromatic hydrocarbons), VOCs (volatile organic compounds), base/neutral compounds, acid extractable compounds, total/TCLP RCRA metals, pH and/or methanol, based on the historical uses of the site, information regarding the contents of the site's UST systems, and the cumulative site investigation results.

Following completion of Pioneer's soil sampling activities, the boreholes were properly abandoned by backfilling with the soil cuttings and/or bentonite chips. Pioneer's complete protocol for subsurface soil sampling is provided in **Appendix C**. A photographic log of the sampling activities is included as **Appendix D**.

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2.5 Field Observations

Field screening (FID) readings above background levels were registered in 15 of the 32 soil borings. No soil discoloration indicative of contamination was identified in any of the soil borings advanced at the subject property. However, a faint petroleum odor was identified in the sandy backfill materials encountered in soil boring B-9, advanced near the 15,000-gallon methanol UST. A complete listing of the FID readings and the geological conditions encountered during drilling are provided on the soil boring logs in **Appendix C**.

2.6 Site Geology

The subsurface materials encountered at the site consisted of approximately 7 – 12 feet of urban fill materials, characterized by loose, organic brown to black, sandy and silty soil with traces of clay and varying amounts of interspersed gravel, crushed brick, glass, cinders and miscellaneous debris. These non-native soils were underlain by alternating tan and gray silt and clay sediments to at least 15 feet BSG (maximum boring terminus).

The geologic materials encountered at the site were compared to the descriptions provided on the Illinois State Geological Survey (ISGS) map dated 1984 and titled *Stack-Unit Mapping of Geological Materials in Illinois to a Depth of 15 Meters*, by Kempton, John P. et al., and the ISGS map dated 1970 and titled *Surficial Geology of the Chicago Region* by Willman and Lineback. According to the maps, the subject site is located in the central portion of Section 35, Township 39 North, Range 13 East of the Third Principal Meridian in the Englewood Quadrangle, and is situated on sediments of the Equality Formation and the Wedron Group (**Appendix A**). The Equality Formation is discontinuous and less than 20 feet thick in the area, and consists of quiet-water lake sediments, dominantly well-bedded silts with thin beds of clay,

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which were deposited on the floors of ancestral Lake Michigan. The Wedron Group is composed of glacial till which contains very poorly sorted silts and clays, and is greater than 20 feet thick in the area. Pioneer also reviewed Plate 1 of the ISGS Circular dated 1984 and titled *Potential for Contamination of Shallow Aquifers in Illinois*, by Berg, Richard C. et al. Plate 1 indicates the subject site is located in an area designated as "E". An "E" classification is described as containing at least 50 feet of uniform, relatively impermeable silty or clayey glacial till with no evidence of interbedded sand or gravel, and indicates that there is a minimal potential for shallow aquifer contamination. Copies of the ISGS and USGS maps are included in Appendix A.

Due to the presence of a significant amount of fill material throughout the site, the native silty clay soils were not routinely encountered during the subsurface investigation activities. However, when identified, the silty clays were generally consistent with the soil descriptions described on the geology maps, which suggests that these sediments are native soils and laterally extensive. A complete listing of the geological conditions encountered during drilling are provided on the soil boring logs in Appendix C. Copies of the ISGS maps are included in Appendix A.

Evidence of groundwater was observed in only 10 of 32 soil borings advanced during the subsurface investigation activities, at depths ranging from 9 – 10 feet BSG. In general, evidence of groundwater was observed in the borings advanced on the north side of the site, and appeared to be the result of discontinuous, perched water within the urban fill materials. Since evidence of potential groundwater was sporadic, and the impacts were primarily confined to the surficial urban fill materials at shallow depths, a groundwater investigation was not warranted at the site (see soil borings logs in Appendix C).

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3.0 UST CLOSURE ACTIVITIES

3.1 Introduction

Prior to job start-up, UST removal and abandonment permit applications were completed by Pioneer and forwarded to the CDOE for approval, along with a *Certification of Site Condition* (Appendix E), based on analytical results from the prior investigation, for the in-place abandonment of the 10,000-gallon heating oil UST. Abandonment in-place of this UST was necessary due to its proximity to the existing subject building and its location in an area with restricted access and numerous overhead utilities. Upon receipt of the approved permits, Pioneer contacted the Chicago Fire Department (CFD) to schedule the field work. All non-private underground utility lines were located by the "DIGGER" on-call network prior to excavation activity.

The UST removal services were performed in accordance with the prevailing state UST regulations set forth in 41 Illinois Administrative Code (IAC) Part 170, and the prevailing federal regulations governing the closure of UST systems. Pioneer is a licensed UST removal contractor in the state of Illinois and its Project Managers and Field Technicians are certified to conduct UST Decommissioning work in the state. In addition, all on-site personnel are 40-hour OSHA trained in Hazardous Waste Operations and Emergency Response and all field technicians are appropriately trained in Confined Space Entry. As a note, to the best of the owner's knowledge, the USTs were classified as "Pre-74" tanks based on the lack of available information regarding the dates these UST systems were last used by the former site owners. As a further note, the current owner had never used the USTs, and was unaware of the presence of these tanks on the subject site.

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3.2 UST Removal/Abandonment Activities

Pioneer initiated UST removal/abandonment activities on December 26th, 2003, by exposing the tops of each of the USTs, and recovering the liquid UST contents from the naphtha UST and methanol UST for proper off-site disposal in advance of the removal activities (Appendix E). On December 29, 2003, UST removal activities resumed by measuring the lower explosive level (LEL) within each tank using a four-gas monitor (an instrument that measures the explosive level, carbon monoxide, hydrogen sulfide, and oxygen contents of specific atmospheres). The LEL within each tank was confirmed to be below 5%, and approval to continue with the decommissioning of the tanks was granted by the CDOE and CFD Inspectors.

Pioneer personnel equipped with the appropriate safety equipment (tyvek suits, neoprene boots and gloves, a full-face respirator, and supplied air) proceeded to enter the heating oil UST for inspection and cleaning. The tank interior was wiped with squeegees and sorbent pads after the recovery of residual liquids by the licensed waste haulers, and the UST was prepared for final abandonment. Liquid UST contents were subsequently recovered from the gasoline UST during these scheduled UST removal/abandonment activities, along with additional product recovered from the naphtha UST at the time of removal (Appendix E). The 2,500-gallon naphtha tank and 250-gallon gasoline tank were subsequently removed from each respective excavation, placed above ground on plastic sheeting, secured to prevent rolling, and cut in-half for inspection and cleaning. The tank interiors were wiped with squeegees and sorbent pads, and the wastes generated during tank cleaning activities were properly disposed of by licensed waste haulers. The tanks were cut, cleaned, rendered unfit for further use, and transported to a scrap yard for final decommissioning, dismantling and scrapping (Appendix E), along with the piping related to the UST systems. A photographic log depicting various stages of the UST removal activities is provided in Appendix D. All UST removal and abandonment procedures were witnessed by CDOE and/or CFD inspectors, as required.

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On December 30, 2003, Pioneer removed the 15,000-gallon methanol UST and filled the heating oil UST with an inert concrete slurry mix. The methanol UST was removed from the excavation, and a 4-foot by 4-foot circular opening was subsequently cut in each end of the UST so that it could be accessed for cleaning (using the methodology previously discussed). After cleaning, the UST was transported off-site for scrapping. In connection with the abandonment of the 10,000-gallon heating oil UST, approximately 51 cubic yards of slurry mix (an approved fill material by the CDOE and the Office of the Illinois State Fire Marshal) were used to fill this tank.

TABLE 3.2.1
SUMMARY OF UST INFORMATION

Tank Number	Contents	Actual Capacity (gallons)	Release? Y/N	Laboratory Analyses
1	Gasoline	250	No	BTEX, MTBE, Lead
2	Naphtha	2,500	Yes	VOCs, PNAs, Base/Neutrals,
3	Methanol	15,000	No	Methanol
4	Fuel Oil	10,000	No	BTEX, PNAs

Note: Pursuant to Section 732.310

During the removal of the 2,500-gallon naphtha UST, Pioneer and the CDOE Inspector observed water/liquid emanating from corrosion holes at the base of the UST, which were subsequently recovered from the excavation following UST removal. Based on evidence that a release had occurred from the naphtha UST system, the CDOE Inspector requested that the Illinois Emergency Management Agency (IEMA) be notified. IEMA was notified of the release on December 30, 2003, and the subject property was assigned LUST incident number (#H20031887). As a note, a "Regulatory Status Form" is included as an attachment to this report which signifies the owner's formal election "*Not to Proceed*" with the LUST regulations for the release from this Pre-74 UST (Appendix B). Considering that the owner is already voluntarily pursuing a focused NFR letter for the site through the State's SRP, closure of this LUST incident will be pursued in conjunction with the closure of the entire site.

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Following the UST removals, Pioneer personnel collected samples from the exposed UST excavations to measure for the presence of a release (Figure 2). Samples were collected from the backfill, base, and sidewalls of the excavation, in accordance with the procedures outlined in Appendix C, and were field screened for evidence of contamination using a photoionization detector (PID). In connection with the LUST incident (#H20031887) assigned as a result of the release from the naphtha UST, Pioneer submitted the samples collected from this former UST excavation for analyses of the appropriate indicator contaminants, pursuant to Section 732.310 (Table 3.2.1). For the remaining excavations, the two samples displaying the highest field evidence of potential impacts from each excavation were submitted to an independent laboratory for analysis in accordance with the Part 170 regulations, based on the field screening results (Table 3.2.2). Since samples were previously collected from the area of the abandoned heating oil UST during site investigation activities, no further analyses were performed for this tank. All analytical tests were performed in accordance with accepted USEPA test methods. It should also be noted that testing was previously performed in close proximity to all of these USTs prior to their removal during previous site investigation activities. Upon completion of the UST removal activities, the excavations were backfilled with the original excavated materials and clean stone fill. In addition, the appropriate notifications were submitted to the DOE and OSFM (Appendix E) to document the status of the UST systems. A photographic log of the UST closure activities is included in Appendix D.

Table 3.2.2
*Summary of Headspace Screening Results -
UST Excavations*

Location	G-EW	G-WW	G-NW	G-SW	G-Backfill	G-Base
Gasoline UST	1.9	1.7	1.3	3.4	4.2	5.5

Location	M-EW	M-WW	M-NW-1	M-NW-2	M-SW-1	M-SW-2	M-Backfill-1	M-Backfill-2	M-Base-1	M-Base-2
Methanol UST	6.7	2.4	3.3	6.2	8.1	8.8	9.0	8.2	9.8	7.6

Location	N-EW	N-WW	N-NW	N-SW	N-Backfill-1	N-Backfill-2	N-Base-1	N-Base-2
Naphtha UST	5.2	3.5	3.4	4.0	3.7	3.2	7.9	8.2

Note: Bolded cells indicate samples selected for laboratory analysis.

All samples from naphtha UST excavation submitted for analysis to comply with the LUST regulations.

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4.0 TIER 1 EVALUATION

4.1 Analytical Results - Introduction

The soil sample analytical results contained herein were compared to the most stringent soil remediation objectives (SROs) for industrial/commercial properties, also referred to as Tier 1 SROs, found in 35 IAC Part 742 (TACO). The Tier 1 SROs for industrial/commercial properties include both "industrial/commercial" and "construction worker" populations, and represent baseline contaminant concentrations that are acceptable to the IEPA. These Tier 1 SROs are based on a risk assessment that incorporates a conservative exposure scenario and yields values relative to three primary exposure pathways, namely ingestion, inhalation, and the soil component of the groundwater ingestion exposure route (migration to groundwater). The migration to groundwater route is further divided into Class I and Class II groundwater designations.

Although these Tier 1 SROs may not represent final remediation objectives for the site, the analytical results of the soil samples were compared to the most stringent Tier 1 SROs for industrial/commercial property use, given its historical and intended future use. Pursuant to the Part 742 regulations, the values for all of the exposure pathways are presented for matters of comparison, and the most stringent becomes the Tier 1 SRO for the site. In addition, the background concentration of benzo(a)pyrene in soils within the City of Chicago (1,300 $\mu\text{g/kg}$), as identified in the report titled *Polynuclear Aromatic Hydrocarbon Background Study, City of Chicago*, prepared by Tetra Tech and dated February 24, 2003, is suggested as the applicable remediation objective for this compound at this site, pursuant to 35 IAC Section 742.920 and as allowed by the Illinois EPA. As a note, since the site is located in the City of Chicago, which utilizes a groundwater ordinance and MOU to prohibit the potable use of groundwater within the

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City, the Tier 1 SROs for the migration to groundwater exposure route(s) are not considered *applicable* for this site, but are shown in the attached tables for matters of reference.

Based on the RECs identified during the Phase I ESA and the results of the field screening activities, 19 soil samples were chosen for analyses during the preliminary round of soil testing, and 10 additional soil samples were analyzed during the subsequent phase of site investigation, based on the prior results (Table 2.2). Samples collected from the UST excavations following removals were analyzed for the appropriate indicator contaminants, as identified in Section 732.310 (Table 3.2.1).

4.2 Tier 1 Evaluation

The analytical results of the soil samples collected during site activities indicated that various COCs were detected at levels which exceeded the most stringent industrial/commercial Tier 1 SROs, mainly certain metals, PNAs, and one VOC (tetrachloroethene-PCE). To further evaluate elevated levels of total lead in certain samples collected during the subsurface investigations, TCLP (toxicity characteristic leaching potential) lead testing was performed on the four soil samples that exhibited the highest total lead concentrations (B-5, B-15, B-21 and B-22). The analytical results confirmed that no samples exhibited TCLP lead levels above the "toxicity" characteristic, which defines a hazardous waste (40 CFR Part 261.24, Table 1); however, two of the four samples contained TCLP lead above the most stringent Tier 1 SROs for the migration to groundwater pathway. A summary of the soil boring locations with COCs exceeding the Tier 1 SROs for each of the industrial/commercial exposure pathways is provided in Table 4.2. The results of these analyses are also provided in the attached Table Nos. 1-9, and Appendix F.

The results from UST excavation closure samples indicated that all of the targeted contaminants at each former UST location were either not detected, or were detected at levels below the most stringent Tier 1 SROs in all of the samples analyzed. The results of these analyses are also

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provided in the attached Table Nos. 10-14, and Appendix F. The sampling locations are identified in Figure 2.

Table 4.2
Summary of COCs > Industrial/Commercial Tier 1 SROs
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Location / Depth	Tier 1 Industrial/Commercial TACO Exposure Pathways					
	Migration to Class I GW	Migration to Class II GW	Ingestion (Industrial/ Commercial)	Inhalation (Industrial/ Commercial)	Ingestion (Construction Worker)	Inhalation (Construction Worker)
B-5 (9-12')	Cr, Se	Se	As, Pb		Pb	
B-10 (0-3')	PCE					
B-13 (6-9')	Se	Se				
B-15 (0-3')	Se, BaA, BbF	Se, BaA	As, Pb, BaA, BaP, BbF, DiA		Pb	
B-16 (0-3')			Pb		Pb	
B-17 (0-3')	Cr					
B-21 (6-9')	Pb, Se	Se	As, Pb		Pb	
B-22 (3-6')	As, Cr, Hg, Pb, Se	Pb, Se	As, Pb		Pb	
B-24 (6-9')	Se	Se	Pb		Pb	
B-27 (3-6')	Se	Se	BaP			
B-29 (3-6')	Se	Se	Pb, BaP		Pb	
B-31 (0-3')	Cr					
B-32 (0-3')	Se	Se				

Notes: As = Arsenic
BaA = Benzo(a)anthracene
BaP = Benzo(a)pyrene
BbF = Benzo(b)fluoranthene
Cr = Chromium

DiA = Dibenzo(a,h)anthracene
Hg = Mercury
Pb = Lead
PCE = Tetrachloroethene
Se = Selenium

4.3 Tier 1 Evaluation – Summary

Based on the cumulative analytical results, the nature and extent of on-site impacts in the soil have been adequately characterized. The analytical results indicate that the upper soil/fill materials on portions of the subject property have been impacted, primarily by various metals, and to a lesser extent, by PNAs. No significant impacts from the site's former UST systems were identified, although a minor release was reported from the naphtha UST at the request of the CDOE inspector. Therefore, as described in the following sections of this report, Pioneer utilized the procedures outlined in TACO to evaluate the actual risk posed by the on-site soil contamination given the site-specific conditions and intended future use of the site.

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5.0 ENDANGERMENT ASSESSMENT/REMEDIAL OBJECTIVES

5.1 Introduction

The Tier 1 evaluation indicated that PCE at one location, four PNAs at three locations, and five metals throughout the site were detected at concentrations above the applicable Tier 1 SROs for industrial/commercial properties. In order to determine the appropriate level of remedial action necessary to adequately address these exceedances, Pioneer performed an endangerment assessment in accordance with the procedures outlined in the TACO regulations to address the identified COCs at the Remediation Site. The endangerment assessment was conducted to determine the completeness of the various exposure routes affected by applicable COCs pursuant to Section 742, Subpart C, and included the development of a Tier 2 SRO for PCE pursuant to Section 742.600. The first stage of the endangerment assessment is to identify the COCs that exceed the applicable Tier 1 SROs. Those COCs are identified in Table 5.1.1.

Table 5.1.1
COCs > Industrial/Commercial Pathway-Specific Tier 1 SROs

Location / Depth	Tier 1 Industrial/Commercial TACO Exposure Pathways					
	Migration to Class I GW	Migration to Class II GW	Ingestion (Industrial/ Commercial)	Inhalation (Industrial/ Commercial)	Ingestion (Construction Worker)	Inhalation (Construction Worker)
As	✓		✓			
Cr	✓					
B(a)A	✓	✓	✓			
B(a)P			✓			
B(b)F	✓		✓			
DiA			✓			
Hg	✓					
Pb	✓	✓	✓		✓	
PCE	✓					
Se	✓	✓				

Notes: As = Arsenic
BaA = Benzo(a)anthracene
BaP = Benzo(a)pyrene
BbF = Benzo(b)fluoranthene
Cr = Chromium

DiA = Dibenzo(a,h)anthracene
Hg = Mercury
Pb = Lead
PCE = Tetrachloroethene
Se = Selenium

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In addition, prior to conducting an endangerment assessment, certain minimum requirements must be evaluated and satisfied. These requirements are provided below and are followed by an explanation of how they apply to the subject site.

- *The sum of the concentrations of all organic COCs shall not exceed the attenuation capacity of the soil as determined under Section 742.215 (Section 742.305(a));*

Pioneer calculated the highest potential *total* concentration of organic COCs at the site by adding the sum of detected organic COCs and detection limits for "non-detect" organic COCs at the site. Pioneer used VOC concentrations from B-10 and PNA concentrations from B-15 to calculate a maximum total organic COC concentration of approximately 21.36 ppm (parts per million). The total potential concentration of organic COCs is below the default soil attenuation values for soils within the upper three feet (6,000 ppm) and below three feet (2,000 ppm). Therefore, pursuant to Section 742.215(b)(2), this requirement has been satisfied.

- *in generating remediation objectives, if more than one noncarcinogenic COC at the site affects the same target organ, the calculated remediation values shall be corrected for cumulative effects (Section 742.600(e)(2)); and*

There are no non-carcinogenic COCs at the site above Tier 1 SROs that affect the same target organ. Thus, this requirement has been satisfied by default.

- *the concentrations of any organic COCs remaining in the soil shall not exceed the soil saturation limit as determined under Section 742.220 (Section 742.305(b)).*

Table 5.1.2 compares the highest concentration for each of the organic COCs detected at the site to the corresponding soil saturation limit (Csat) provided in Appendix A of the Part 742 regulations.

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Table 5.1.2
 Soil Saturation Limit Evaluation Results

COC	Highest Detected Concentration (ppb)	Csat (ppb)
Tetrachloroethene	160	240,000

Notes:

Parts per billion (ppb or µg/kg)

Pursuant to Appendix A of 35 IAC Part 742

As shown in **Table 5.1.2**, no soil saturation limits have been exceeded and this requirement has been satisfied.

- any soil which contains COCs shall not exhibit characteristics of reactivity for hazardous waste (Section 742.305(c));

Although specific tests were not performed to determine this characteristic, given the available contaminant data, it is unlikely that soils at the site would exhibit the characteristics of reactivity as outlined in 35 IAC 721.123 (Appendix F); therefore, Pioneer believes this requirement has been satisfied.

- any soil which contains COCs shall not exhibit a pH less than or equal to 2.0 or greater than or equal to 12.5 (Section 742.305(d)); and

The measured pH of soil samples collected from the site exhibited pH values within this acceptable range (**Appendix F**); therefore, this requirement has been satisfied.

- any soil which contains arsenic, barium, cadmium, chromium, lead, mercury, selenium or silver shall not exhibit any of the characteristics of toxicity for hazardous waste (Section 742.305(e)).

Of the inorganics listed above, only lead was detected at *total* concentrations that could potentially exhibit this characteristic. However, the results of subsequent TCLP testing

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indicated that levels of TCLP lead were below the level which defines a characteristic hazardous waste; therefore, this requirement has been satisfied.

Based on the above evaluation, the general requirements of Sections 742.305 and 742.600 have been satisfied. Thus, the TACO endangerment assessment and pathway exclusion are allowable.

5.2 Exposure Route Exclusions

As an initial step in the endangerment assessment, exposure routes were evaluated pursuant to Subpart C of the Part 742 regulations to determine the feasibility of excluding specific pathways for those COCs detected above the associated Tier 1 SROs. As provided in Subpart C of the Part 742 regulations, exposure pathways may be excluded from consideration if it can be demonstrated that an actual or potential impact to a receptor or potential receptor can be eliminated. If the threat of exposure to contamination is eliminated, then the exposure pathway can be excluded and their corresponding objectives are no longer applicable. The information outlined in Table 5.1.1 identifies the exposure pathways and COCs that required further evaluation.

5.3 Soil Ingestion/Inhalation Exposure Route

The site-specific conditions related to the endangerment assessment (Section 5.1) indicate that the industrial/commercial soil ingestion exposure route may be eliminated through the use of engineered barriers, pursuant to Section 742.315(b)(1)(B). As discussed, the majority of the surface of the western portion of site is impacted by various PNAs or metals at levels above the Tier 1 SROs for the ingestion pathway. To address these impacts, the existing asphalt pavement and concrete surfaces across the entire surface of the site will be utilized as engineered barriers,

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pursuant to Section 742.1105(c)(2). An institutional control, in the form of the NFR letter, will be utilized to ensure that the engineering controls remain in-place, thus, rendering this pathway incomplete.

Based on the analytical results, no COCs were detected above the industrial/commercial Tier 1 SROs for the soil inhalation pathway. Thus, the exclusion of this exposure route will not be required.

To address the exceedances of the Tier 1 SROs for the construction worker ingestion/inhalation pathways, a site safety plan will be required, pursuant to Sections 742.310(b)(2) and 742.315(b)(2) for those areas where impacts remain in-place. An institutional control, in the form of the NFR letter, will ensure that the proper safety precautions for construction workers are provided prior to future excavation and construction activities in those areas. The locations requiring a site safety plan are identified in Figure 3.

5.4 Groundwater Ingestion Exposure Route

The evaluation of this exposure route included a Tier 2 evaluation of the soil component of the groundwater ingestion exposure route (migration to groundwater) to determine the appropriate remediation objectives for the site. As a further protective measure, and due to practical considerations, the groundwater pathway will also be formally excluded pursuant to Section 742.320 by using the Chicago Groundwater Ordinance and associated MOU.

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5.4.1 Tier 2 Evaluation - Migration to Groundwater

As identified in Table 5.1.1 in Section 5.1 of this report, arsenic, chromium, benzo(a)anthracene, benzo(b)fluoranthene, lead, mercury, PCE, and selenium were detected above the Tier 1 SROs for the migration to groundwater pathway, and thus, have the potential to affect groundwater quality on-site. To provide an initial evaluation of the migration to groundwater pathway with respect to *organic* COCs, Pioneer conducted a Tier 2 evaluation using site-specific information pursuant to Section 742.700. Pursuant to Subparts F and G of the Part 742 regulations, Tier 2 SROs may be developed utilizing site-specific information and are considered to be equally protective of human health and the environment even though they are less stringent than the more conservative Tier 1 SROs.

Pioneer performed the Tier 2 evaluation utilizing 35 IAC Part 742, Appendix C, Table A, Soil Screening Level (SSL) Equation S28 (Mass Limit) for PCE. The default input parameters provided in 35 IAC Part 742, Appendix C, were used for all variables, with the exception of the site-specific values for source area size (< 0.1 acres), and contaminant depth (2 meters; based on the field screening data and analytical results from this isolated sampling location, B-10). All of the remaining values used in the calculations were default parameters provided in 35 IAC Part 742. In addition, Tier 2 SROs were developed for benzo(a)anthracene and benzo(b)fluoranthene, the two PNAs that exceeded the Tier 1 SROs for the migration to groundwater pathway. The Tier 2 SROs for these PNAs were generated using RBCA Equations R12 through R24. The default input parameters provided in 35 IAC Part 742, Appendix C were used for all variables, with the exception of the site-specific value for source area size and organic carbon content (f_{oc} ; Appendix G); while values for hydraulic conductivity (K) and hydraulic gradient (i) were *conservatively** estimated for purposes of the endangerment assessment, since no default or site-specific data was available. (*Note: K value obtained from a second MRC SRP site, located approximately 1 block northeast of Remediation Site, at 3535 W. 31st Street, Chicago.)

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The Tier 2 SROs were generated utilizing third-party software (TACO PRO 2.0™ for Windows™). A copy of the Tier 2 Data Worksheets containing the calculated Tier 2 SROs is provided in Appendix G. The concentrations of organic COCs detected at the site were then compared to *calculated* Tier 2 SROs, and were found to be below the most stringent, *calculated* Tier 2 SROs for the Migration to Class I groundwater pathway. The comparison of Pioneer's investigation results to the Tier 2 SROs are listed in Table 5.4.1.

Table 5.4.1
Tier 2 SROs – Migration to Groundwater Pathway

Contaminant	Maximum Detected Concentration (mg/kg)	Tier 2 SRO – Migration to Class I Groundwater (mg/kg)
Tetrachloroethene	0.160	0.420
Benzo(a)anthracene	8.9	18.273
Benzo(b)fluoranthene	10.0	98.764

5.4.2 (Migration to) Groundwater Ingestion Exposure Route Exclusion

Since all of the COCs in the soil could be eliminated from further consideration with respect to the soil ingestion exposure route, and all of the *organic* COCs in the soil could be eliminated from further consideration with respect to the soil migration to groundwater exposure route, using Tier 2 SROs, the only COCs that remained were certain inorganics. To address these COCs remaining at levels above the Tier 1 SROs for migration to groundwater, the soil migration to groundwater exposure route will be excluded pursuant to Section 742.320 and Section 742.1105(c)(1) for these remaining COCs. Given that the infiltration of precipitation through the impacted shallow soil at the site provides the only pathway for the leaching of COCs from the soils to the perched groundwater, and that the existing engineered barriers throughout the surface of the site have minimized the potential for infiltration of precipitation, Pioneer believes that these remaining inorganics may be excluded as COCs with respect to the soil migration to groundwater pathway through the maintenance of existing engineered barriers. In

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route is required, since the exposure pathway is incomplete. Since the site is located in the City of Chicago, the use of groundwater in the vicinity of the site is prohibited under Section 11-8-390 of the Municipal Code of Chicago and the associated Memorandum of Understanding (MOU) with the IEPA. In connection with the elimination of this exposure pathway, the following site-specific data demonstrate that the requirements of Section 742.320 have been met:

1. there was no evidence of free product identified at the subject property;
2. there are no potable water supply wells in use within the City of Chicago (per ISGS and ISWS well searches; **Appendix H**); and,
3. there are no surface water bodies within 600 feet of the site (**Appendix A**).

Pursuant to Section 742.1015(b)(1), a copy of the ordinance restricting groundwater use is included in **Appendix H**. The delineated area of *potential* groundwater contamination above the applicable remediation objectives (Section 742.1015(b)(2)) and the boundaries of all properties (Remediation Site only) under which *potentially-contaminated* groundwater is located, (Section 742.1015(b)(3)), is included as **Figure 3**. In accordance with Section 742.1015(b)(4), since the groundwater use restriction applies only to the subject property; no additional notifications to off-site properties are required.

Thus, Pioneer believes there is sufficient information to demonstrate that there is no actual or potential impact of contaminants to receptors from the groundwater ingestion exposure route, and it is possible to exclude the groundwater ingestion exposure route as allowed by Section 742.300(c).

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6.0 SUMMARY AND CONCLUSIONS

Pioneer Engineering & Environmental Services, Inc. (Pioneer) was engaged by MRC Polymers, Inc. (MRC), the client and Remediation Applicant (RA), to perform various environmental activities at the subject property located at 3307 South Lawndale Avenue in Chicago (Cook County), Illinois (**Appendix A, Figure 1**). Site activities included the completion of a Phase I Environmental Site Assessment (ESA), multiple phases of subsurface investigation, underground storage tank (UST) identification and removals, and Illinois EPA (IEPA) reporting in connection with the subject site's historical use as a foundry and plastics manufacturing facility. The purpose was to determine the environmental condition of the site, and evaluate the level of remedial action necessary to demonstrate compliance with the applicable state regulations and obtain a "focused" No Further Remediation (NFR) Letter from the IEPA pursuant to Title 35 IAC (Illinois Administrative Code) Part 740 Subpart F, and Section 58.10 of the Illinois Environmental Protection Act (the Act), specifically for the land bounded by the subject property borders (Remediation Area).

Based on the RECs and the layout of the subject property, Pioneer developed a sampling plan designed to characterize the site conditions and achieve the project objectives in accordance with the Part 740 regulations. UST removals were completed, along with various phases of subsurface investigation, and the results of the investigation activities indicated that various PNAs, metals, and PCE were present in the site's soil at levels which exceeded the Tier 1 SROs. The subsurface information indicates that the majority of impacts are likely a result of the predominant urban fill layer below the site. In addition, sampling results associated with the LUST incident (naphtha UST only) indicated that all of the applicable COCs were below the most stringent Tier 1 SROs. Based on the testing results, Pioneer developed an approach to closure which would include the in-place management of contamination, pursuant to the regulations of 35 IAC Part 742 (Tiered Approach to Corrective Action Objectives – TACO).

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In order to address the impacts identified at the site, Pioneer performed an endangerment assessment, which included the elimination of exposure routes and development of Tier 2 SROs, in accordance with the procedures outlined in the IEPA's TACO regulations. The purpose of this endangerment assessment was to demonstrate that areas of residual contamination do not represent a threat to human health or the environment and can be effectively managed in-place.

The results of the endangerment assessment indicated that all of the COCs at the site could be eliminated, either through the development of Tier 2 SROs, or through pathway exclusions, and that the risk associated with the contamination identified at the subject property can be adequately managed in-place. Thus, Pioneer believes that the site warrants the issuance of a focussed "No Further Remediation" letter pursuant to 35 IAC Section 740.420 and 415 ILCS 5/58.10 of the Illinois Environmental Protection Act.

Pioneer respectfully requests that NFR letter be issued upon approval of this SIR/RACR. Based on the endangerment assessment presented in this report, Pioneer believes the NFR letter will include the following conditions and institutional controls:

- An industrial/commercial land use restriction shall be utilized to prohibit the residential use of the site;
- Engineered barriers, which will include the existing concrete floors of the building structure, and the existing asphalt pavements and concrete walkways which cover practically the entire subject property (Figures 1 & 2) will remain intact above the contaminated soils, and be properly maintained in the future, as depicted in the Site Base Map;
- The migration to groundwater pathway is eliminated by utilizing existing engineered barriers, and the groundwater ingestion pathway is eliminated utilizing the City of Chicago's groundwater ordinance and MOU, which prohibit the use of groundwater within Chicago for potable purposes;

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- A Site Safety Plan must be developed if excavation is to be performed in any areas identified on the Site Base Map as exceeding construction worker SROs; and
- The NFR Letter shall be recorded as a permanent part of the chain of title for the subject property and serve as an appropriate institutional control.

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7.0 CLOSING REMARKS

This report has been prepared for the sole use of the client identified in the report and evaluation by the Illinois EPA, and can not be relied upon by other persons or entities without the joint permission of the client and Pioneer Engineering & Environmental Services, Inc. (Pioneer). The observations and conclusions contained herein are limited by the scope and intent of the work mutually agreed upon by the client and Pioneer and the work actually performed. There are no warranties, implied or expressed, concerning the environmental integrity of areas and/or mediums not analytically tested.

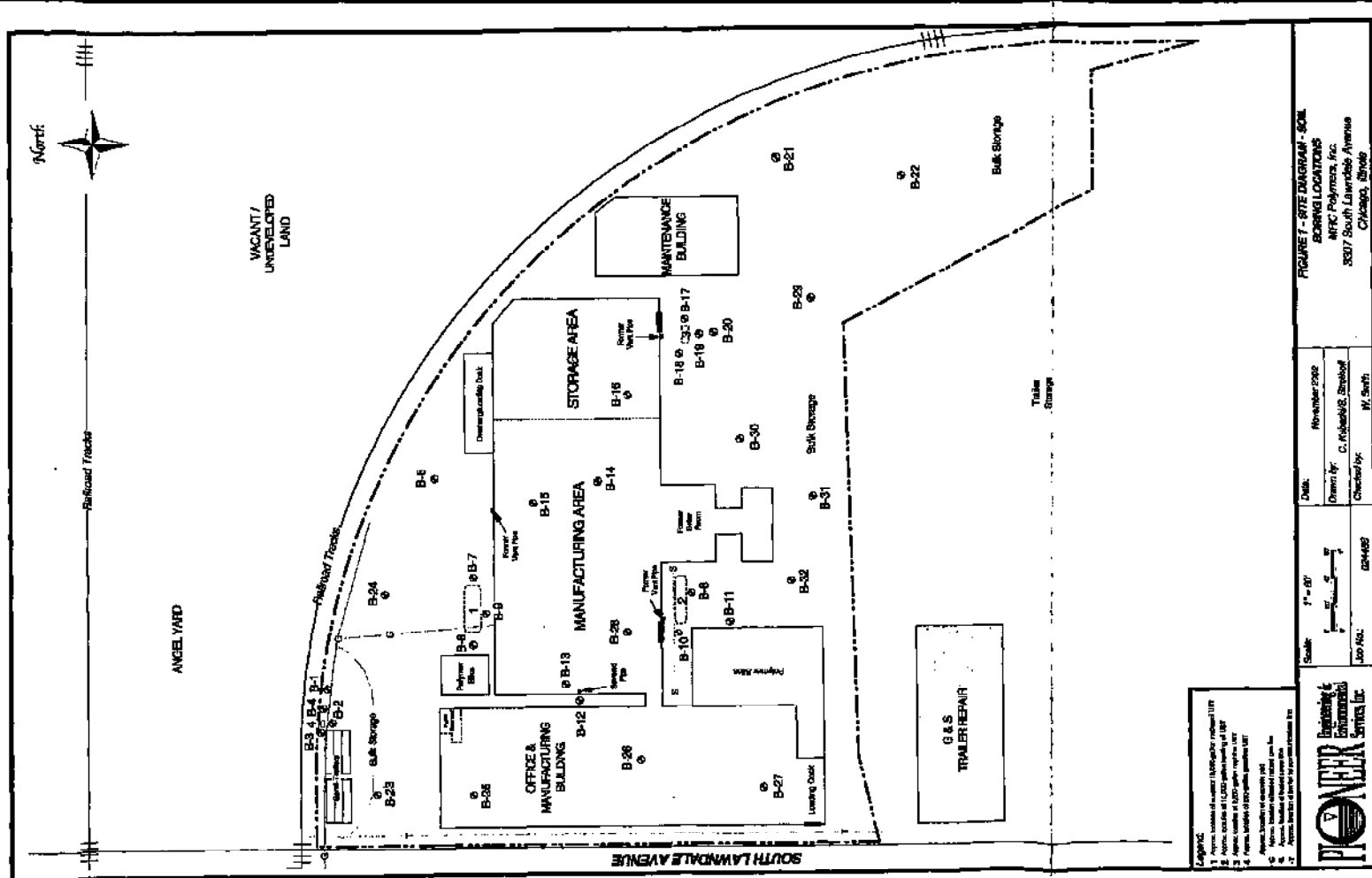
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8.0 REFERENCES

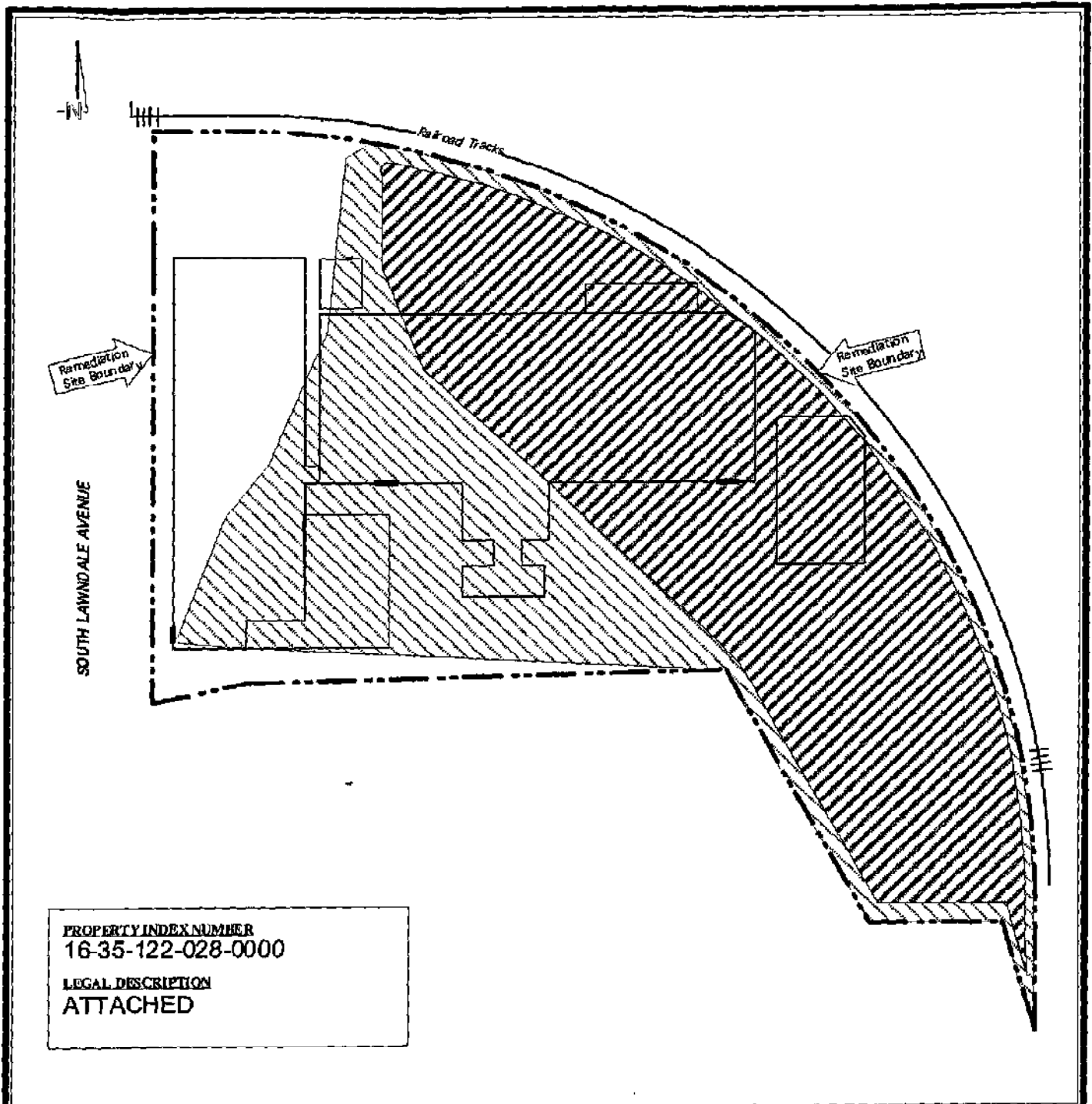
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LIST OF FIGURES

- FIGURE 1: Site Diagram – Soil Boring Locations
- FIGURE 2: Site Diagram – UST Closure Sampling Locations
- FIGURE 3: Site Base Map



SITE BASE MAP
LPC #0316575051 - COOK COUNTY
MRC POLYMERS, INC.
SITE REMEDIATION PROGRAM



PIONEER Engineering & Environmental Services, Inc.

Figure 3
Site Base Map
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Scale:
1" = 100'

Legend:
 Area of Potential Groundwater Impact
 Area Requiring Site Safety Plan

Date: Feb. 2004

Drawn by: J. Kelly

Checked by: W. Smith

Job No.: 02448B

PARCEL 1:

That part of the West half of the East half of the South East quarter of the North West quarter of Section 35, Township 39 North, Range 13 East of the 3rd Principal Meridian, described as follows: Beginning at a point 33 feet East of the West line and 150 feet South of the North line of said West half of the East half of the South East quarter of the North West quarter of Section 35, Township 39 North, Range 13 East of the 3rd Principal Meridian; thence East on a line parallel to the North line of said South East quarter (said line being also the Southerly line of right of way of the Chicago and Illinois Western Railroad Company, a distance of 39.3 feet to point of curve in said right of way; thence South Easterly on curve tangent to last described line and convex to the North East with a radius of 573.7 feet to its intersection with the Eastline of the said West half of the East half of the South East quarter of the North West quarter of Section 35; thence South on last described line 477.71 feet to a line parallel to and 690.31 feet South of the North line of said South East quarter, etc. thence West on last described line 300.32 feet to a line parallel to and 95 feet East of the West line of the East half of said South East $\frac{1}{4}$, etc., said line being also the East line of Lawndale Avenue; thence North 540.31 feet to the point of beginning.

EXHIBIT- A
ATTACHED TO AND
DATED 2/1/84, AN
AND BETWEEN HELE
LESSEE AND 3307

North line of S.E. $\frac{1}{4}$ of the

33'

on line and 0.05 ft. of Corner

North

North

PARCEL 2:

That part of the East half of the East half of the South East quarter of the North West quarter of Section 35, Township 33 North, Range 13 East of the 3rd Principal Meridian, described as follows:- Beginning at the point of intersection of the West line of said East half of the East half of the South East quarter of the North West quarter of the North West quarter of Section 35, aforesaid; thence East on last described line 292.36 feet; thence Southeast on a straight line 77.55 feet to a point in a line parallel to and 20 feet West of the East line of the North West quarter of Section 35, aforesaid; said point being 565.11 feet North of the South line of said North West quarter; thence North 41.61 feet to a point of a curve in the Southerly line of right of way of the Chicago and Illinois Western Railroad Company, thence NorthWesterly along the Southerly line of right of way of said Chicago and Illinois Western Railroad Company on curve tangent to the West line of right of way of the Illinois Northern Railway and convex to North East with a radius of 573.7 feet to a point on the West line of the East half of the East half of the South East quarter of the North West quarter of Section 35 aforesaid; thence South on last described line 477.71 feet to the place of beginning, all in Cook County, Illinois.

THE LEASE
V88. BY
WICE INC.
LESSOR

Section 35-39-13

1500

COMPLETED

TABLES

TABLE NO. 1:	Soil Sample Analytical Results: BTEXs
TABLE NO. 2:	Soil Sample Analytical Results: PNAs
TABLE NO. 3:	Soil Sample Analytical Results: VOCs
TABLE NO. 4:	Soil Sample Analytical Results: Acid Extractable Compounds
TABLE NO. 5:	Soil Sample Analytical Results: Base/Neutral Compounds
TABLE NO. 6:	Soil Sample Analytical Results: Total Metals
TABLE NO. 7:	Soil Sample Analytical Results: TCLP Lead
TABLE NO. 8:	Soil Sample Analytical Results: Methanol
TABLE NO. 9:	UST Confirmation Sample Analytical Results: VOCs
TABLE NO. 10:	UST Confirmation Sample Analytical Results: PNAs
TABLE NO. 11:	UST Confirmation Sample Analytical Results: Base/Neutral Compounds
TABLE NO. 12:	UST Confirmation Sample Analytical Results: Total Lead
TABLE NO. 13:	UST Confirmation Sample Analytical Results: Methanol

TABLE NO. 1
Soil Sample Analytical Results: BTEX
3307 South Lawndale Avenue | Chicago, Illinois

Tier 1 Soil Remediation Objectives (Tier 1 SROs) Industrial/Commercial Property Use*												
ANALYTE	Route Specific Values										Soil Component of Groundwater Ingestion Exposure Route	
	Industrial - Commercial					Construction Worker					Class I	Class II
	Ingestion	Inhalation	B-11 [†] (3-6")	B-10 [†] (6-9")	B-10 [†] (0-3")	B-9 [†] (9-12")	B-8 [†] (9-12")	B-5 [†] (9-12")	B-3 [†] (6-9")	B-2 [†] (6-9")		
Benzene	100,000	1,600	< 2.1	< 2.5	3	2.7	< 2.1	2.8	7.4	< 3.0		30
Toluene	410,000,000	650,000	< 5.4	< 6.2	8.2	5.1	< 5.3	< 6.4	7.7	< 7.5		12,000
Ethylbenzene	200,000,000	400,000	< 5.4	< 6.2	< 5.1	< 4.7	< 5.3	< 6.4	< 6.4	< 7.5		13,000
Xylenes	1,000,000,000	320,000	< 5.4	< 6.2	< 5.1	6.3	< 5.3	< 6.4	< 6.4	< 7.5		150,000

Tier 1 Soil Remediation Objectives (Tier 1 SROs) Industrial/Commercial Property Use*												
ANALYTE	Route Specific Values										Soil Component of Groundwater Ingestion Exposure Route	
	Industrial - Commercial					Construction Worker					Class I	Class II
	Ingestion	Inhalation	B-11 [†] (3-6")	B-10 [†] (6-9")	B-10 [†] (0-3")	B-9 [†] (9-12")	B-8 [†] (9-12")	B-5 [†] (9-12")	B-3 [†] (6-9")	B-2 [†] (6-9")		
Benzene	100,000	1,600	< 3.2	< 1.8	< 1.9	< 2.2	< 1.5	< 2.3	< 2.7	< 2		30
Toluene	410,000,000	650,000	< 7.9	< 4.6	< 4.8	< 5.4	< 3.7	< 5.7	< 6.8	< 5		12,000
Ethylbenzene	200,000,000	400,000	< 7.9	< 4.6	< 4.8	< 5.4	< 3.7	< 5.7	< 6.8	< 5		13,000
Xylenes	1,000,000,000	320,000	< 7.9	< 4.6	< 4.8	< 5.4	< 3.7	< 5.7	< 6.8	< 5		150,000

Notes: Results listed in µg/kg (parts per billion)

EPA test method SW846, 8260/5035

Shaded/Boxed cell indicates value exceeds the most stringent Tier 1 SRO

"<" Indicates not detected at stated detection limits

"..." Indicates value not available

* Pursuant to 35IAC 742-Tiered Approach to Corrective Action Objectives (Appendix B, Table B)

† Excerpted from VOC data

TABLE NO. 1
Soil Sample Analytical Results: PNAr
3307 South Lemoine Avenue / Chicago, Illinois

ANALYSIS		The 1st and 2nd National Opponents Other 1,000s Average: Congressional Property 2011																																								Chicago State Property 2011																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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ANALYSIS	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-20	B-21	B-22	B-23	B-24	B-25	B-26	B-27	B-28	B-29	B-30	B-31	B-32	B-33	B-34	B-35	B-36	B-37	B-38	B-39	B-40	B-41	B-42	B-43	B-44	B-45	B-46	B-47	B-48	B-49	B-50	B-51	B-52	B-53	B-54	B-55	B-56	B-57	B-58	B-59	B-60	B-61	B-62	B-63	B-64	B-65	B-66	B-67	B-68	B-69	B-70	B-71	B-72	B-73	B-74	B-75	B-76	B-77	B-78	B-79	B-80	B-81	B-82	B-83	B-84	B-85	B-86	B-87	B-88	B-89	B-90	B-91	B-92	B-93	B-94	B-95	B-96	B-97	B-98	B-99	B-100	B-101	B-102	B-103	B-104	B-105	B-106	B-107	B-108	B-109	B-110	B-111	B-112	B-113	B-114	B-115	B-116	B-117	B-118	B-119	B-120	B-121	B-122	B-123	B-124	B-125	B-126	B-127	B-128	B-129	B-130	B-131	B-132	B-133	B-134	B-135	B-136	B-137	B-138	B-139	B-140	B-141	B-142	B-143	B-144	B-145	B-146	B-147	B-148	B-149	B-150	B-151	B-152	B-153	B-154	B-155	B-156	B-157	B-158	B-159	B-160	B-161	B-162	B-163	B-164	B-165	B-166	B-167	B-168	B-169	B-170	B-171	B-172	B-173	B-174	B-175	B-176	B-177	B-178	B-179	B-180	B-181	B-182	B-183	B-184	B-185	B-186	B-187	B-188	B-189	B-190	B-191	B-192	B-193	B-194	B-195	B-196	B-197	B-198	B-199	B-200	B-201	B-202	B-203	B-204	B-205	B-206	B-207	B-208	B-209	B-210	B-211	B-212	B-213	B-214	B-215	B-216	B-217	B-218	B-219	B-220	B-221	B-222	B-223	B-224	B-225	B-226	B-227	B-228	B-229	B-230	B-231	B-232	B-233	B-234	B-235	B-236	B-237	B-238	B-239	B-240	B-241	B-242	B-243	B-244	B-245	B-246	B-247	B-248	B-249	B-250	B-251	B-252	B-253	B-254	B-255	B-256	B-257	B-258	B-259	B-260	B-261	B-262	B-263	B-264	B-265	B-266	B-267	B-268	B-269	B-270	B-271	B-272	B-273	B-274	B-275	B-276	B-277	B-278	B-279	B-280	B-281	B-282	B-283	B-284	B-285	B-286	B-287	B-288	B-289	B-290	B-291	B-292	B-293	B-294	B-295	B-296	B-297	B-298	B-299	B-300	B-301	B-302	B-303	B-304	B-305	B-306	B-307	B-308	B-309	B-310	B-311	B-312	B-313	B-314	B-315	B-316	B-317	B-318	B-319	B-320	B-321	B-322	B-323	B-324	B-325	B-326	B-327	B-328	B-329	B-330	B-331	B-332	B-333	B-334	B-335	B-336	B-337	B-338	B-339	B-340	B-341	B-342	B-343	B-344	B-345	B-346	B-347	B-348	B-349	B-350	B-351	B-352	B-353	B-354	B-355	B-356	B-357	B-358	B-359	B-360	B-361	B-362	B-363	B-364	B-365	B-366	B-367	B-368	B-369	B-370	B-371	B-372	B-373	B-374	B-375	B-376	B-377	B-378	B-379	B-380	B-381	B-382	B-383	B-384	B-385	B-386	B-387	B-388	B-389	B-390	B-391	B-392	B-393	B-394	B-395	B-396	B-397	B-398	B-399	B-400	B-401	B-402	B-403	B-404	B-405	B-406	B-407	B-408	B-409	B-410	B-411	B-412	B-413	B-414	B-415	B-416	B-417	B-418	B-419	B-420	B-421	B-422	B-423	B-424	B-425	B-426	B-427	B-428	B-429	B-430	B-431	B-432	B-433	B-434	B-435	B-436	B-437	B-438	B-439	B-440	B-441	B-442	B-443	B-444	B-445	B-446	B-447	B-448	B-449	B-450	B-451	B-452	B-453	B-454	B-455	B-456	B-457	B-458	B-459	B-460	B-461	B-462	B-463	B-464	B-465	B-466	B-467	B-468	B-469	B-470	B-471	B-472	B-473	B-474	B-475	B-476	B-477	B-478	B-479	B-480	B-481	B-482	B-483	B-484	B-485	B-486	B-487	B-488	B-489	B-490	B-491	B-492	B-493	B-494	B-495	B-496	B-497	B-498	B-499	B-500	B-501	B-502	B-503	B-504	B-505	B-506	B-507	B-508	B-509	B-510	B-511	B-512	B-513	B-514	B-515	B-516	B-517	B-518	B-519	B-520	B-521	B-522	B-523	B-524	B-525	B-526	B-527	B-528	B-529	B-530	B-531	B-532	B-533	B-534	B-535	B-536	B-537	B-538	B-539	B-540	B-541	B-542	B-543	B-544	B-545	B-546	B-547	B-548	B-549	B-550	B-551	B-552	B-553	B-554	B-555	B-556	B-557	B-558	B-559	B-560	B-561	B-562	B-563	B-564	B-565	B-566	B-567	B-568	B-569	B-570	B-571	B-572	B-573	B-574	B-575	B-576	B-577	B-578	B-579	B-580	B-581	B-582	B-583	B-584	B-585	B-586	B-587	B-588	B-589	B-590	B-591	B-592	B-593	B-594	B-595	B-596	B-597	B-598	B-599	B-600	B-601	B-602	B-603	B-604	B-605	B-606	B-607	B-608	B-609	B-610	B-611	B-612	B-613	B-614	B-615	B-616	B-617	B-618	B-619	B-620	B-621	B-622	B-623	B-624	B-625	B-626	B-627	B-628	B-629	B-630	B-631	B-632	B-633	B-634	B-635	B-636	B-637	B-638	B-639	B-640	B-641	B-642	B-643	B-644	B-645	B-646	B-647	B-648	B-649	B-650	B-651	B-652	B-653	B-654	B-655	B-656	B-657	B-658	B-659	B-660	B-661	B-662	B-663	B-664	B-665	B-666	B-667	B-668	B-669	B-670	B-671	B-672	B-673	B-674	B-675	B-676	B-677	B-678	B-679	B-680	B-681	B-682	B-683	B-684	B-685	B-686	B-687	B-688	B-689	B-690	B-691	B-692	B-693	B-694	B-695	B-696	B-697	B-698	B-699	B-700	B-701	B-702	B-703	B-704	B-705	B-706	B-707	B-708	B-709	B-710	B-711	B-712	B-713	B-714	B-715	B-716	B-717	B-718	B-719	B-720	B-721	B-722	B-723	B-724	B-725	B-726	B-727	B-728	B-729	B-730	B-731	B-732	B-733	B-734	B-735	B-736	B-737	B-738	B-739	B-740	B-741	B-742	B-743	B-744	B-745	B-746	B-747	B-748	B-749	B-750	B-751	B-752	B-753	B-754	B-755	B-756	B-757	B-758	B-759	B-760	B-761	B-762	B-763	B-764	B-765	B-766	B-767	B-768	B-769	B-770	B-771	B-772	B-773	B-774	B-775	B-776	B-777	B-778	B-779	B-780	B-781	B-782	B-783	B-784	B-785	B-786	B-787	B-788	B-789	B-790	B-791	B-792	B-793	B-794	B-795	B-796	B-797	B-798	B-799	B-800	B-801	B-802	B-803	B-804	B-805	B-806	B-807	B-808	B-809	B-810	B-811	B-812	B-813	B-814	B-815	B-816	B-817	B-818	B-819	B-820	B-821	B-822	B-823	B-824	B-825	B-826	B-827	B-828	B-829	B-830	B-831	B-832	B-833	B-834	B-835	B-836	B-837	B-838	B-839	B-840	B-841	B-842	B-843	B-844	B-845	B-846	B-847	B-848	B-849	B-850	B-851	B-852	B-853	B-854	B-855	B-856	B-857	B-858	B-859	B-860	B-861	B-862	B-863	B-864	B-865	B-866	B-867	B-868	B-869	B-870	B-871	B-872	B-873	B-874	B-875	B-876	B-877	B-878	B-879	B-880	B-881	B-882	B-883	B-884	B-885	B-886	B-887	B-888	B-889	B-890	B-891	B-892	B-893	B-894	B-895	B-896	B-897	B-898	B-899	B-900	B-901	B-902	B-903	B-904	B-905	B-906	B-907	B-908	B-909	B-910	B-911	B-912	B-913	B-914	B-915	B-916	B-917	B-918	B-919	B-920	B-921	B-922	B-923	B-924	B-925	B-926	B-927	B-928	B-929	B-930	B-931	B-932	B-933	B-934	B-935	B-936	B-937	B-938	B-939	B-940	B-941	B-942	B-943	B-944	B-945	B-946	B-947	B-948	B-949	B-950	B-951	B-952	B-953	B-954	B-955	B-956	B-957	B-958	B-959	B-960	B-961	B-962	B-963	B-964	B-965	B-966	B-967	B-968	B-969	B-970	B-971	B-972	B-973	B-974	B-975	B-976	B-977	B-978	B-979	B-980	B-981	B-982	B-983	B-984	B-985	B-986	B-987	B-988	B-989	B-990	B-991	B-992	B-993	B-994	B-995	B-996	B-997	B-998	B-999	B-1000	B-1001	B-1002	B-1003	B-1004	B-1005	B-1006	B-1007	B-1008	B-1009	B-1010	B-1011	B-1012	B-1013	B-1014	B-1015	B-1016	B-1017	B-1018	B-1019	B-1020	B-1021	B-1022	B-1023	B-1024	B-1025	B-1026	B-1027	B-1028	B-1029	B-1030	B-1031	B-1032	B-1033	B-1034	B-1035	B-1036	B-1037	B-1038	B-1039	B-1040	B-1041	B-1042	B-1043	B-1044	B-1045	B-1046	B-1047	B-1048	B-1049	B-1050	B-1051	B-1052	B-1053	B-1054	B-1055	B-1056	B-1057	B-1058	B-1059	B-1060	B-1061	B-1062	B-1063	B-1064	B-1065	B-1066	B-1067	B-1068	B-1069	B-1070	B-1071	B-1072	B-1073	B-1074	B-1075	B-1076	B-1077	B-1078	B-1079	B-1080	B-1081	B-1082	B-1083	B-1084	B-1085	B-1086	B-1087	B-1088	B-1089	B-1090	B-1091	B-1092	B-1093	B-1094	B-1095	B-1096	B-1097	B-1098	B-1099	B-1100	B-1101	B-1102	B-1103	B-1104	B-1105	B-1106	B-1107	B-1108	B-1109	B-1110	B-1111	B-1112	B-1113	B-1114	B-1115	B-1116	B-1117	B-1118	B-1119	B-1120	B-1121	B-1122	B-1123	B-1124	B-1125	B-1126	B-1127	B-1128	B-1129	B-1130	B-1131	B-1132	B-1133	B-1134	B-1135	B-1136	B-1137	B-1138	B-1139	B-1140	B-1141	B-1142	B-1143	B-1144	B-1145	B-1146	B-1147	B-1148	B-1149	B-1150	B-1151	B-1152	B-1153	B-1154	B-1155	B-1156	B-1157	B-1158	B-1159	B-1160	B-1161	B-1162	B-1163	B-1164	B-1165	B-1166	B-1167	B-1168	B-1169	B-1170	B-1171	B-1172	B-1173	B-1174	B-1175	B-1176	B-1177	B-1178	B-1179	B-1180	B-1181	B-1182	B-1183	B-1184	B-1185	B-1186	B-1187	B-1188	B-1189	B-1190	B-1191	B-1192	B-1193	B-1194	B-1195	B-1196	B-1197	B-1198	B-1199	B-1200	B-1201	B-1202	B-1203	B-1204	B-1205	B-1206	B-1207	B-1208	B-1209	B-1210	B-1211	B-1212	B-1213	B-1214	B-1215	B-1216	B-1217	B-1218	B-1219	B-1220	B-1221	B-1222	B-1223	B-1224	B-1225	B-1226	B-1227	B-1228	B-1229	B-1230	B-1231	B-1232	B-1233	B-1234	B-1235	B-1236	B-1237	B-1238	B-1239	B-1240	B-1241	B-1242	B-1243	B-1244	B-1245	B-1246	B-1247	B-1248	B-1249	B-1250	B-1251	B-1252	B-1253	B-1254	B-1255	B-1256	B-1257	B-1258	B-1259	B-1260	B-1261	B-1262	B-1263	B-1264	B-1265	B-1266	B-1267	B-1268	B-1269	B-1270	B-1271	B-1272	B-1273	B-1274	B-1275	B-1276	B-1277	B-1278	B-1279	B-1280	B-1281	B-1282	B-1283	B-1284	B-1285	B-1286	B-1287	B-1288	B-1289	B-1290	B-1291	B-1292	B-1293	B-1294	B-1295	B-1296	B-1297	B-1298	B-1299	B-1300	B-1301	B-1302	B-1303	B-1304	B-1305	B-1306	B-1307	B-1308	B-1309	B-1310	B-1311	B-1312	B-1313	B-1314	B-1315	B-1316	B-1317	B-1318	B-1319	B-1320	B-1321	B-1322	B-1323	B-1324	B-1325	B-1326	B-1327	B-1328	B-1329	B-1330

[illegible]

TABLE NO. 3
Soil Sample Analytical Results: VOCs
3307 South Lawrence Avenue | Chicago, Illinois

ANALYTE	Tier 1 Soil Remediation Objectives (Tier 1 SROs) Industrial / Commercial Property Use*												Soil Component of Groundwater Ingestion Exposure Route				
	Remediation Specific Values												Class I	Class II			
	Industrial / Commercial						Construction Worker										
	Ingestion		Inhalation		Ingestion		Inhalation		Ingestion		Inhalation						
Benzene (MCL)	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	200,000,000	1,700,000	200,000,000	130,000	23,000	110,000
1,2-Dichloroethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	18,000,000	1,900,000	1,800,000	300,000	60	300
1,1-Dichloroethene	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	4,000	17,000	89,000	110	2	2
1,2-Dichloropropane	<0.4	<0.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	70	320	1,900	410	0.4	4
1,1,2-Trichloroethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	60,000	700	1,400,000	990	20	100
1,2-Dichloropropane	<0.4	<0.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	94,000	23,000	1,800,000	990	30	190
1,1,2-Trichloroethane (total)	<0.4	<0.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	97,000	2,100	1,200,000	399	4	20
1,1,1-Trichloroethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	—	1,200,000	—	1,200,000	2,000	9,600
1,1,2-Trichloroethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	8,300,000	1,800,000	8,300,000	1,800,000	20	300
1,1,2,2-Tetrachloroethane	<1.3	<0.94	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	—	—	—	—	—	—
Acetone	190	150	190	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	200,000,000	190,000,000	200,000,000	190,000,000	16,000	16,000
Benzene	2.8	2.7	3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	280,000	1,300	4,300,000	2,100	30	170
Bromodichloromethane	<0.4	<0.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	92,000	3,000,000	7,000,000	3,000,000	600	600
Bromochloromethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	720,000	800,000	16,000,000	140,000	800	800
Bromodichloromethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	8,800,000	14,000	1,800,000	5,500	300	1,200
Bromochloromethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	200,000,000	19,000,000	200,000,000	19,000,000	17,000	17,000
Carbon Disulfide	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	200,000,000	720,000	20,000,000	9,000	32,000	160,000
Carbon Tetrachloride	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	44,000	500	410,000	200	70	320
Chlorobenzene	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	41,000,000	210,000	4,100,000	1,300	1,000	6,900
Chlorodichloromethane	<0.4	<0.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	41,000,000	1,300,000	41,000,000	1,300,000	400	400
Chloroethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	—	—	—	—	—	—
Chloroform	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	240,000	250	2,100,000	760	600	2,900
Chloromethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	—	—	—	—	—	—
Chlorotetrafluoroethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	—	—	—	—	—	—
1,1,2-Dichloroethane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	20,000,000	1,200,000	20,000,000	1,200,000	400	1,100
1,2-Dichloropropane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	200,000,000	400,000	200,000,000	28,000	13,000	19,000
Methylene Chloride	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	760,000	74,000	12,000,000	34,000	20	280
Styrene	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	410,000,000	1,300,000	410,000,000	690,000	4,000	18,000
Trichloroethene	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	110,000	20,000	7,400,000	28,000	60	340
1,2,3-Trichloropropane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	410,000,000	610,000	410,000,000	42,000	12,000	29,000
1,2,3-Trichloropropane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	41,000,000	3,100,000	41,000,000	3,100,000	700	5,400
Trichloroethene	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	410,000,000	610,000	410,000,000	42,000	12,000	29,000
1,2,3-Trichloropropane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	410,000,000	610,000	410,000,000	42,000	12,000	29,000
1,2,3-Trichloropropane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	1,800,000,000	1,800,000	220,000,000	10,000	178,000	178,000
1,2,3-Trichloropropane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	7,900	1,100	770,000	1,100	10	20
1,2,3-Trichloropropane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	1,800,000,000	410,000	410,000,000	410,000	133,000	133,000
1,2,3-Trichloropropane	<0.4	<0.7	<1	<0.9	<0.8	<0.7	<0.7	<0.4	<0.8	<0.6	<0.9	20,000,000	8,800,000	140,000	140,000	320	320

TABLE NO. 4
Pioneer Soil Sample Analytical Results: Acid Extractable Compounds
3307 South Lawndale Avenue / Chicago, Illinois

Tier 1 Soil Remediation Objectives (Tier 1 SROs) Industrial/Commercial Property Use*							
ANALYTE	B-20 (6.9%)	Route Specific Values				Soil Component of Groundwater Ingestion Exposure Route	
		Industrial - Commercial		Construction Worker			
		Ingestion 200,000,000	Inhalation --	Ingestion 200,000,000	Inhalation 270,000	Class I 270,000	Class II 1,400,000
2,4,5-Trichlorophenol	<450	200,000,000	390,000	200,000,000	540,000	200	770
2,4,6-Trichlorophenol	<450	500,000	--	11,000,000	--	1,000	1,000
2,4-Dichlorophenol	<150	6,100,000	--	610,000	--	9,000	9,000
2,4-Dimethylphenol	<150	41,000,000	--	41,000,000	--	200	200
2,4-Dinitrophenol	<450	4,100,000	--	410,000	--	4,000	20,000
2-Chlorophenol	<450	10,000,000	53,000,000	10,000,000	53,000,000	15,000	15,000
2-Methyl-4,6-dinitrophenol	<2100	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	<450	100,000,000	--	100,000,000	--	400,000	400,000
2-Nitrophenol	<450	--	--	100,000,000	--	30	140
4-Chloro-3-methylphenol	<450	--	--	--	--	--	--
3,8,4-Methylphenol (p-Cresol)	<450	--	--	--	--	--	--
4-Nitrophenol	<2100	--	--	--	--	--	--
Benzoic Acid	<2100	1,000,000,000	--	820,000,000	--	100,000	100,000
Pentachlorophenol	<2100	24,000	--	520,000	--	20	140
Phenol	<450	1,000,000,000	--	120,000,000	--	100,000	100,000

Notes: Results listed in µg/kg (parts per billion-ppb)

EPA test method SW846, 8270

Shaded/boxed cell indicates value exceeds the most stringent Tier 1 SRO

<C* indicates not detected at stated detection limits

...* indicates value not available

* Pursuant to 35 IAC Part 742, Tiered Approach to Corrective Action Objectives (Appendix B, Table B)

TABLE NO. 5
Pioneer Soil Sample Analytical Results: Base/Neutral Compounds
3307 South Lawndale Avenue / Chicago, Illinois

ANALYTE	Tier I Soil Remediation Objectives (Tier I SROs) Industrial/Commercial Property Use*									
	Route Specific Values					Soil Component of Groundwater Ingestion Exposure Route				
	Industrial - Commercial		Construction Worker			Class I		Class II		
	Ingestion	Inhalation	Ingestion	Inhalation		Ingestion		Ingestion		
1,2,4-Trichlorobenzene	20,000,000	3,200,000	2,000,000	920,000	5,000	17,000	43,000	5,000	17,000	43,000
1,2-Dichlorobenzene	180,000,000	560,000	18,000,000	310,000	17,000	43,000	5,000	17,000	43,000	5,000
1,3-Dichlorobenzene	<450	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	<450	17,000,000	--	340,000	2,000	11,000	0.8	0.7	0.7	0.7
2,4-Dinitrobenzene	8,400	--	180,000	--	0.8	0.7	0.7	0.8	0.8	0.8
2,6-Dinitrobenzene	8,400	--	180,000	--	0.7	0.7	0.7	0.7	0.7	0.7
2-Chloronaphthalene	<450	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	<450	--	--	--	--	--	--	--	--	--
2-Nitroaniline	<2300	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	<2300	13,000	280,000	--	7.0	83	--	--	--	--
3-Nitroaniline	<2300	--	--	--	--	--	--	--	--	--
4-Bromophenylphenylamine	<450	--	--	--	--	--	--	--	--	--
4-Chloroaniline	<450	8,200,000	320,000	--	700	700	700	700	700	700
4-Chlorophenylphenylamine	<450	--	--	--	--	--	--	--	--	--
4-Nitroaniline	<2300	--	--	--	--	--	--	--	--	--
Benzidine	<2300	--	--	--	--	--	--	--	--	--
Bis(2-chloroethoxy)methane	<450	--	--	--	--	--	--	--	--	--
Bis(2-chloroethyl) ether	<450	5,600	470	75,000	660	0.4	0.4	0.4	0.4	0.4
Bis(2-ethylphenyl)phthalate	<450	410,000	31,000,000	4,100,000	31,000,000	3,600,000	31,000,000	3,600,000	31,000,000	3,600,000
Bisphenol A	<450	410,000,000	990,000	412,000,000	990,000	930,000	930,000	930,000	930,000	930,000
Carbazole	<450	250,000	--	6,200,000	620	2,800	2,800	2,800	2,800	2,800
Di-n-butyl phthalate	<450	200,000,000	2,300,000	200,000,000	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000
Di-n-octyl phthalate	<450	41,000,000	10,000,000	41,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Dibenzofuran	<450	--	--	--	--	--	--	--	--	--
Diethyl phthalate	<450	1,000,000,000	2,000,000	1,000,000,000	2,000,000	470,000	470,000	470,000	470,000	470,000
Dimethyl phthalate	<450	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	<140	4,000	1,800	78,000	2,600	2,000	11,000	2,000	11,000	2,000
Hexachlorobutadiene	<450	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	<450	14,000,000	16,000	14,000,000	1,100	400,000	2,200,000	400,000	2,200,000	400,000
Hexachlorocyclopentadiene	<140	2,000,000	--	2,000,000	--	500	2,600	500	2,600	500
Isophthalic acid	<450	410,000,000	4,600,000	410,000,000	4,600,000	8,300	8,300	8,300	8,300	8,300
o-Nitrosodiphenylamine	<82	800	--	18,000	--	0.05	0.05	0.05	0.05	0.05
p-Nitrosodiphenylamine	<450	1,200,000	--	23,000,000	--	1,000	5,600	1,000	5,600	1,000
Nitrobenzene	<140	1,000,000	140,000	1,000,000	9,400	100	100	100	100	100

Notes: Results listed in ug/kg (parts per billion-ppb)
EPA test method SW846, 8270
Shaded/Boxed cell indicates value exceeds the mean stringent Tier I SRO
"--" indicates not detected at stated detection limits
"--" indicates value not available
* Pursuant to 45 IAC Pa. 742-11(a) Appendix to Corrective Action Objectives (Appendix B, Table B)

Program to 35 IAC 742-Tiered

TABLE NO. 6 (2 of 2)
Soil Sample Analytical Results: Total RCRA 8 Metals
3307 South Landstate Avenue / Chicago, Illinois

ANALYTE		Tier 1 Soil Remediation Objectives (Tier 1 SROs) Industrial/Commercial Property Use*									
		Roads Specific Values					pH-Specific Migration to Groundwater Values				
		Industrial/Commercial	Construction Worker	Industrial/Commercial	Industrial/Commercial	Industrial/Commercial	Class I	Class II	Class III	Class IV	Class V
pH	8.48	11	10.23	5,300	2,700	7.82	8.12	8.31	8.41	8.51	8.61
Asenic	5,500	3,600	5,300	2,700	7.82	8.12	8.31	8.41	8.51	8.61	8.71
Barium	31,000	31,000	100,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000
Cadmium	< 1,100	< 1,100	19,000	< 1,200	< 1,200	< 1,200	< 1,200	< 1,200	< 1,200	< 1,200	< 1,200
Chromium	5,600	10,000	9,200	23,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000
Lead	9,700	8,300	170,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000
Manganese	< 110	< 110	120	470	470	470	470	470	470	470	470
Selenium	1,400	< 1,100	1,600	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Silver	< 1,100	< 1,100	< 1,100	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500

Notes: Results listed in ug/kg or ppb (parts per billion)

< indicates not detected at stated detection limits

NA indicates analyte not tested

* indicates value not available

Shaded/bolded cells indicate concentration detected above most stringent Tier 1 SRO

(1) SROs provided are for total chromium

(2) No pH-specific values are available for this compound, therefore the background concentration as identified in 35 (AC 762, Appendix A, Table G) is provided

(3) Since no pH-specific value is provided, the value for the pH range 7.75 - 8.24 is provided for comparison

(4) Below detection limit; however, matrix interference is noted on the laboratory report.

* Pursuant to 35 (AC 762, Tiered Approach to Corrective Action Objectives (Appendix B, Table B))

TABLE NO. 7
Soil Sample Analytical Results: TCLP Lead
3307 South Lawndale Avenue / Chicago, Illinois

ANALYTE	B-5 (9-12')	B-15 (0-3')	B-21 (6-9')	B-22 (3-6')	Tier I Soil Remediation Objectives (Tier I SROs) Industrial/Commercial Property Use*	
					Class I	Class II Hazardous Waste Characteristic ¹
Lead	< 25	7.4	26	910	7.5	100 5,000

Notes: Results listed in ug/l or ppb (parts per billion)

< indicates not detected at stated detection limits

NA indicates analyte not tested

"-" indicates value not available

Shaded/bolded cells indicate concentration detected above most stringent Tier I GRO

(1) Pursuant to 40 CFR Part 261.24, Table 1

* Pursuant to 35 IAC 742-Tiered Approach to Corrective Action Objectives (Appendix B, Table E)

TABLE NO. 8
Soil Sample Analytical Results: Methanol
3307 South Lawndale Avenue / Chicago, Illinois

Tier 1 Soil Remediation Objectives (Tier 1 SROs) Industrial / Commercial Property Use*																	
ANALYTE		B-6 (6-9")		B-7 (9-12")		Route Specific Values				Soil Component of Groundwater Ingestion/Exposure Route							
						Industrial/Commercial		Construction Worker									
								Ingestion	Inhalation			Ingestion	Ingestion				
Methanol		< 15,000 ¹		< 14,000 ¹		1,000,000,000		100,000,000		1,000,000,000		89,000,000		14,000		14,000	

Notes: Results listed in ug/L or ppt (parts per billion)

< indicates not detected at stated detection limits

"-" indicates value not available

¹ Laboratory estimate

Shaded/bolded cells indicate concentration detected above most stringent Tier 1 SRO

UST Confirmation Sample Analysis Results: VOCs
3307 South Lawndale Avenue / Chicago, Illinois

[illegible]

Notes: Family listed by 1970s (units per million-1965)

EPA and control SW846, 8260-5035

Shankar(Shankar) will implement rules across the most stringent TIm = 1.000

^a "c" indicates not detected at stated detection limit.^a—^c indicates value not available.

* Pursuant to 34 IAC Part 742-Tiered Approach to Corrective Action Objectives (Appendix B, Table B), & 34 IAC Part 732, Section 310.

TABLE NO. 10
UST Confirmation Sample Analytical Results: FNA's
3307 South Lawndale Avenue / Chicago, Illinois

ANALYTE	The 1 Soil Remediation Objectives (The 1 SROs) Industrial/Commercial Property Use*								Chicago DDB Background PNA Study **			
	Remediation Specific Values								Background PNA Remediation Specific Values			
	Industrial/Commercial				Construction Worker				Background PNA Remediation Specific Values			
	Extraction	Extraction	Extraction	Extraction	Extraction	Extraction	Extraction	Extraction	Class I	Class II	Chicago	Chicago
Naphthalene	<110	<110	<110	<130	<130	<130	<110	<120	41,000,000	270,000	4,100,000	1,800
Acenaphthene	<110	<110	<110	<130	<130	<130	<110	<120	120,000,000	—	120,000,000	—
Anthracene	300	<110	<110	<130	<130	<130	160	<120	610,000,000	—	610,000,000	—
Fluorene	2,100	630	780	580	<130	<130	1,000	130	82,000,000	—	82,000,000	—
Pyrene	<110	<110	<110	<130	<130	<130	<110	<120	82,000,000	—	82,000,000	—
Pyrene	1,100	340	480	560	<130	<130	720	<120	61,000,000	—	61,000,000	—
CARCINOGENIC PAHs												
Benzo(a)anthracene	850	260	360	260	<130	<130	450	<120	8,000	—	170,000	—
Benzo(a)pyrene	720	220	320	210	<130	<130	370	<120	800	—	17,000	—
Benzo(b)fluoranthene	980	140	330	340	<130	<130	570	130	8,000	—	170,000	—
Benzo(k)fluoranthene	330	110	220	<130	<130	<130	200	<120	78,000	—	1,700,000	—
Chrysene	870	280	380	250	<130	<130	480	<120	780,000	—	17,000,000	—
Dibenz(a,h)anthracene	<110	<110	<110	<130	<130	<130	<110	<120	800	—	17,000	—
Indeno(1,2,3-cd)pyrene	330	<110	280	<130	<130	<130	170	<120	8,000	—	170,000	—
Non-Carcinogenic PAHs												
Acenaphthylene	<110	<110	<110	<130	<130	<130	<110	<120	—	—	—	—
Benzo(a)pyrene	360	<110	220	<130	<130	<130	190	<120	—	—	—	—
Fluorene	1,000	280	320	320	<130	<130	650	<120	—	—	—	—

Notes: Results listed in µg/kg (parts per billion-ppb)

EPA test method 8260A, 8260B/8270

Remediation cell indicates values exceeds the most stringent The 1 SRO

*"—" indicates not detected at stated detection limits

**"—" indicates values not available

(1) Pursuant to 35 IAC 243-Tiered Approach to Corrective Action Objectives (Appendix B, Table B)

(2) Pursuant to Polynuclear Aromatic Hydrocarbon Background Study, City of Chicago, Test Tech, February 14, 2005

(3) Applicable for test under TACO as a Tier 1 Evaluation

TABLE NO. 11
UST Confirmation Sample Analytical Results: Base/Neutral Compounds
3307 South Lawndale Avenue / Chicago, Illinois

ANALYTE	Tier 1 Soil Remediation Objectives (Tier 1 SROs) Industrial/Commercial Property Use*									
	Route Specific Values					Self-Component of Groundwater Ingestion Exposure Rate				
	Industrial - Commercial	Inhalation	Ingestion	Initiation	Initiation	Class I	Class II	Class I	Class II	Class I
1,2,4-Trichlorobenzene	<110	<110	<130	<130	<120	20,000,000	920,000	5,000	52,000	52,000
1,2-Dichlorobenzene	<110	<110	<130	<130	<120	180,000,000	310,000	17,000	43,000	43,000
1,4-Dichlorobenzene	<110	<110	<130	<130	<120	17,000,000	340,000	2,000	11,000	11,000
Bis(2-chloroethyl)ether	<110	<110	<130	<130	<120	5,000	660	0.4	0.4	0.4
Bis(2-ethylhexyl)phthalate	<380	<370	<440	<420	<390	410,000	31,000,000	3,600,000	31,000,000	31,000,000
Hexachlorobenzene	<110	<110	<130	<130	<120	4,000	1,800	2,600	1,000	1,000
Hexachlorocyclopentadiene	<110	<110	<130	<130	<120	14,000,000	15,000	400,000	2,200,000	2,200,000
N-Alkyl-4-ethylphenylamine	<110	<110	<130	<130	<120	800	18,000	0.05	0.05	0.05
N-Alkylphenylamine	<110	<110	<130	<130	<120	1,200,000	25,000,000	1,000	5,600	5,600

Notes: Results listed in ug/kg (units per billion gph)

EPA test method SW846, 8170

Shaded cells indicate values exceed the most stringent Tier 1 SRO

<u>u</u> indicates not detected at stated detection limit

.. indicates value not available

* Pursuant to 35 IAC Part 742-Tiered Approach to Corrective Action Objectives (Appendix B, Table B), & 35 IAC Part 731, Section 310

TABLE NO. 12
UST Confirmation Sample Analytical Results: Total Lead
3307 South Lawndale Avenue / Chicago, Illinois

ANALYTE	Tier 1 Soil Remediation Objectives (Tier 1 SROs) Industrial / Commercial Property Use*					
	Route Specific Values			pH-Specific Migration to Groundwater Values		
	Industrial / Commercial		Construction Worker	pH = 7.25 to 7.74		
	Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II
Lead	320,000	280,000	400,000	400,000	36,000 ⁽¹⁾	36,000 ⁽¹⁾

Notes: Results listed in ug/kg or ppb (parts per billion)

"-" indicates value not available

(1) No pH-specific values are available for this compound, therefore the background concentration as identified in 35 IAC 742, Appendix A, Table G is provided

* Pursuant to 35 IAC Part 742-Tiered Approach to Corrective Action Objectives (Appendix B, Table B), & 35 IAC Part 732, Section 310

TABLE NO. 13
UST Confirmation Sample Analytical Results: Methanol
3307 South Lawndale Avenue / Chicago, Illinois

Tier 1 Soil Remediation Objectives (Tier 1 SROs) Industrial / Commercial Property Use*						
Route Specific Values				Soil Component of Groundwater Ingestion/Exposure Route		
ANALYTE	M-Base-I	M-Backfill-I	Industrial/Commercial		Construction Worker	
			Ingestion	Inhalation	Ingestion	Class I
Methanol	< 12,000	< 11,000	1,000,000,000	100,000,000	89,000,000	14,000
						Class II
						14,000

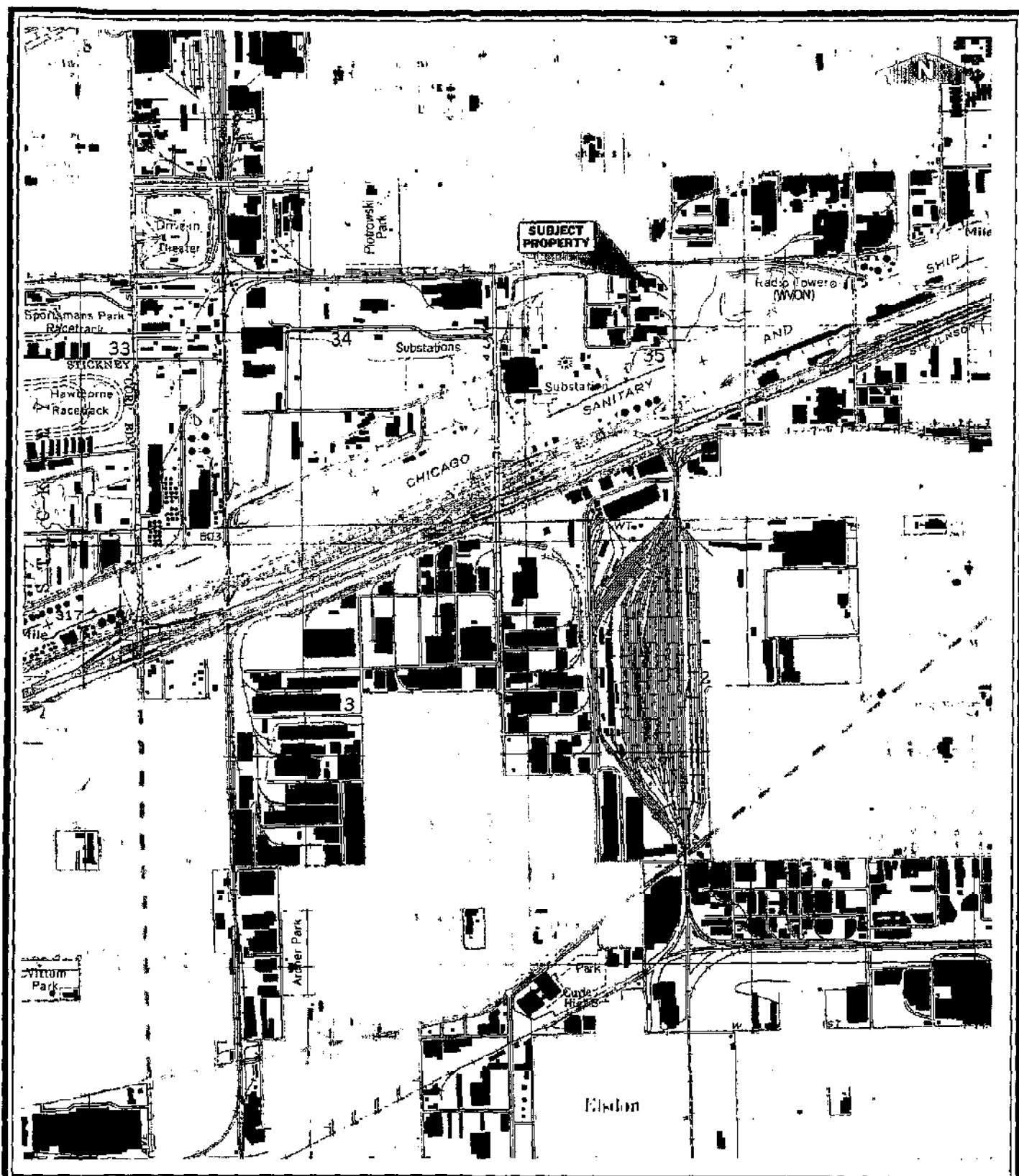
Notes: Results listed in ug/L or ppb (parts per billion)

< indicates not detected at stated detection limits

"-" indicates value not available

Shaded/bolded cells indicate concentration detected above most stringent Tier 1 SRO

APPENDIX A
USGS AND ISGS MAPS



PIONEER Engineering & Environmental Services, Inc.

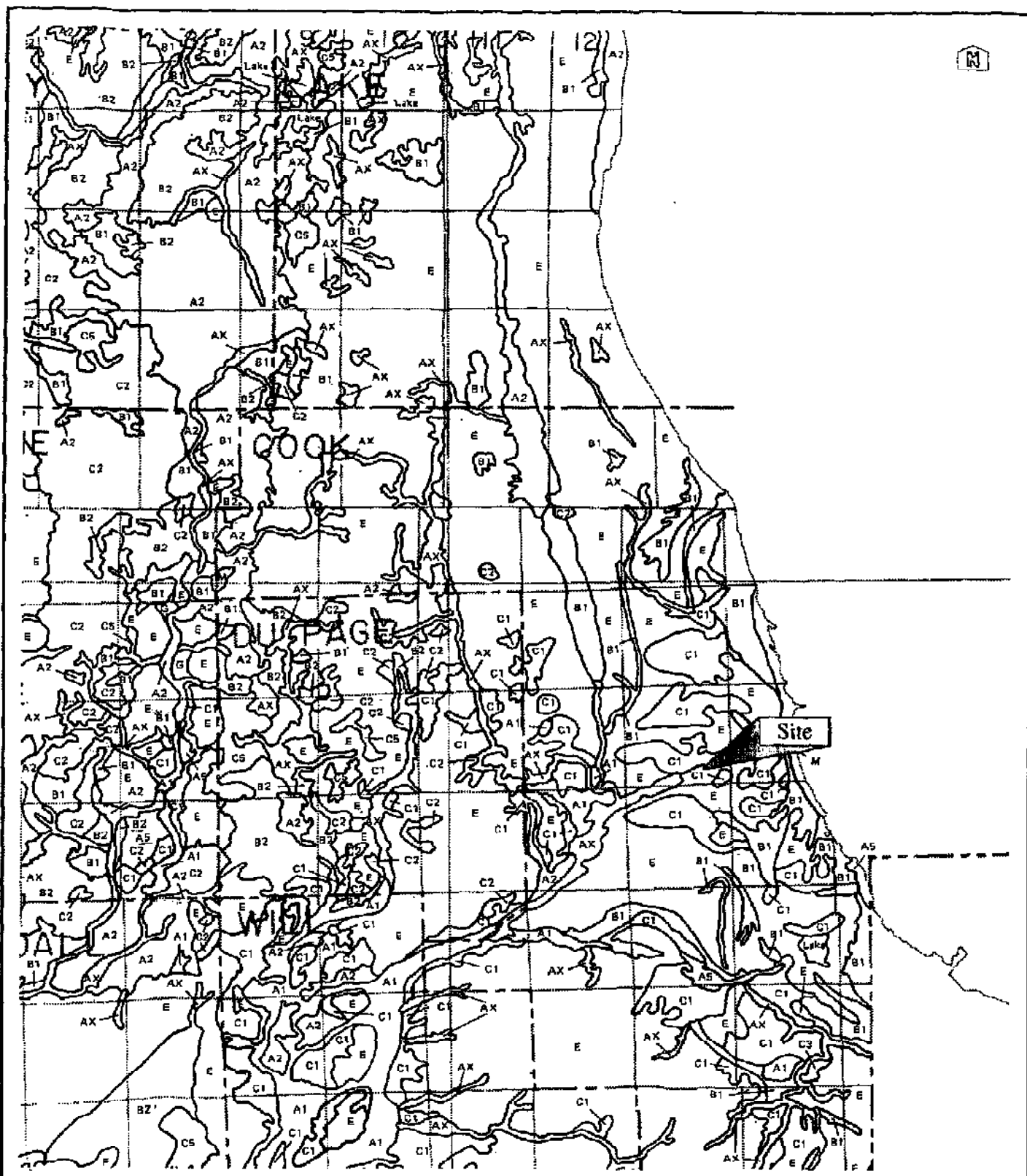
3307 South Lawndale Avenue
Chicago, Illinois

USGS TOPOGRAPHIC MAP
ENGLEWOOD, IL. QUADRANGLE
SITE: Section 35, T.39N, R.13E

Project Number: 02-448

SCALE: 1" = 2000'

DATE: 1997



PIONEER

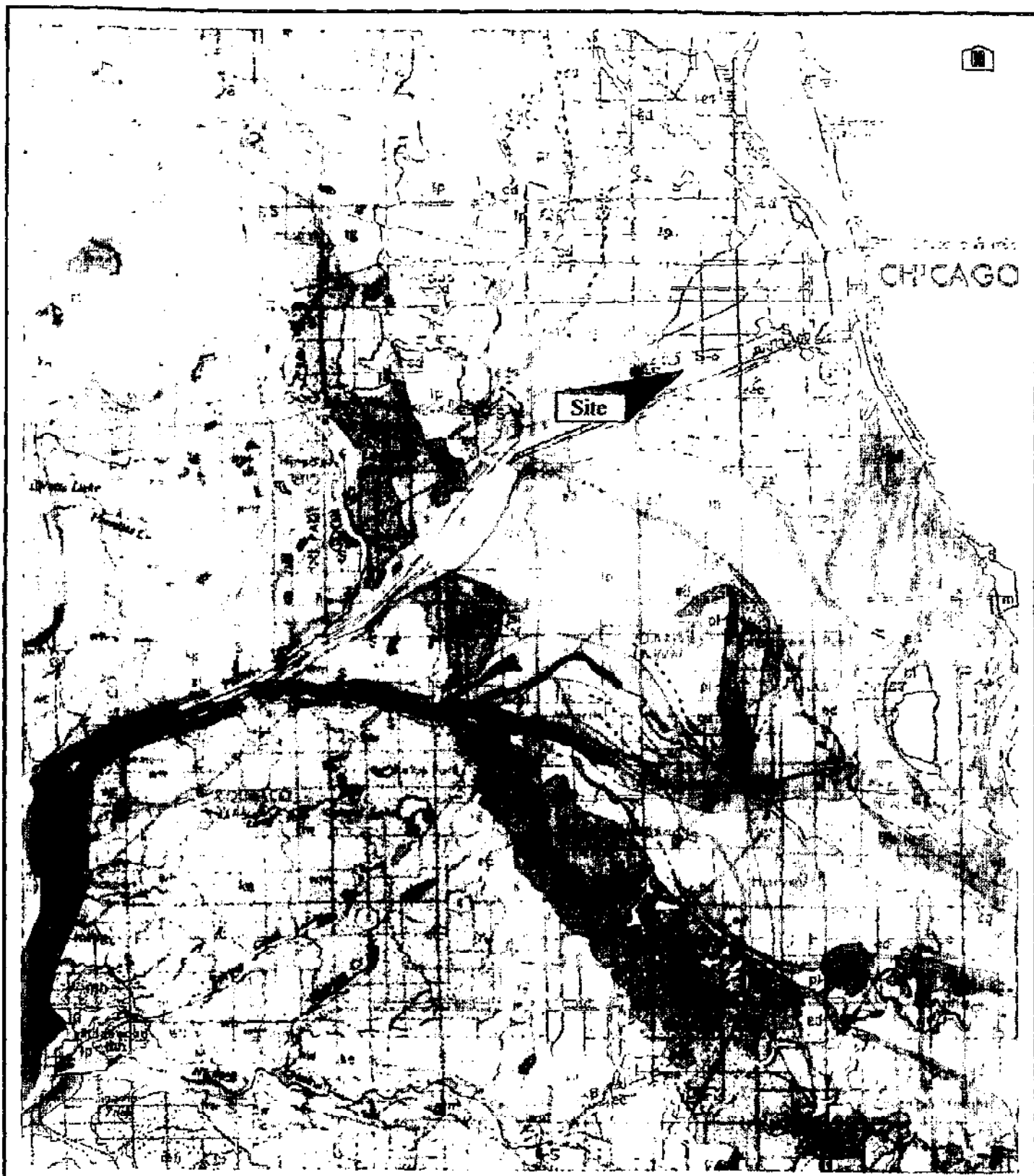
Engineering &
Environmental
Services, Inc.

3535 West 31st Street
Chicago, Illinois
T.39N, R.13E, SEC. 35

KEY: E
DESCRIPTION: Uniform, relatively impermeable silty, clayey till
at least 50 feet thick; no evidence of interbedded sand/gravel.

ISGS Circular 532 Map
Potential for Contamination of Shallow Aquifers
Scale: 1:500,000
1984

Project Number: 02565C



PIONEER Engineering & Environmental Services, Inc.

3535 West 31st Street
Chicago, Illinois
T.39N, R.13E, SEC. 35

ISGS MAP
Surficial Geology of the Chicago Region
Scale 1:250,000
1970

KEY: ec = Cassin Member of Equality Formation
DESCRIPTION: Largely quiet-water lake sediments; dominantly well-bedded silt, locally laminated and containing thin beds of clay.

Project Number: 02565C

APPENDIX B
IEPA REPORTING FORMS

Illinois Environmental Protection Agency
Bureau of Land
Remedial Project Management Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

FOR ILLINOIS EPA USE:

Log No. _____

- ☐ 550B Advance Partial Payment Included
☐ DRM-2 SRP Form Included
☐ DRM-3 Request for Assessment Included
☐ DRM-4 Tax Credit Budget Plan Included

Site Remediation Program Application and Services Agreement (DRM- I) Form

I. Site Identification:

Site Name: MRC Polymers, Inc.
Street Address: 3307 South Lawndale Avenue
City: Chicago ZIP Code: 60632
County: Cook Approximate Size of Site (Acres): 4.5
Illinois Inventory I. D. Number: 0316575051 U.S. EPA I.D. Number: _____
Site Base Map Attached ☒ Illinois EPA Permit(s): _____
LUST/TEMA Incident Number(s), if applicable: H20031887

II. Remediation Applicant ("RA"):

RA's Name: Daniel Ebberhart Title: Authorized Agent
Company: MRC Polymers, Inc.
Street Address: 3307 South Lawndale
City: Chicago State: IL ZIP Code: 60632
Phone: 773-890-5505 FEIN or SSN: 36-3089426

I hereby certify that I am authorized to sign this application and services agreement. I certify that the proposed project meets the eligibility criteria set forth in Section 58-1(a)(2) of the Environmental Protection Act (415 ILCS 5/58-1(a)(2)) and regulations promulgated thereunder and that this submission and all attachments were prepared at my direction. In consideration for the Illinois EPA's agreement to provide (subject to applicable law, available resources, and receipt of the advance partial payment) review and evaluation services for activities carried out pursuant to Title 17 of the Illinois Environmental Protection Act (415 ILCS 5/58-58-12), I agree to:

- (1) Conform with the procedures of Title 17 of the Illinois Environmental Protection Act (415 ILCS 5/58 - 58-12) and implementing regulations;
- (2) Allow for or otherwise arrange site visits or other site evaluations by the Illinois EPA when requested;
- (3) Pay any reasonable costs incurred and documented by the Illinois EPA in providing such services*; and
- (4) Make an advance partial payment to the Illinois EPA for such anticipated services provided in Section V of this application.

As the Remediation Applicant, I understand that I may terminate this services agreement at any time, by notifying the Illinois EPA in writing that services previously requested under the services agreement are no longer wanted. Within 180 days after receipt of the notice, the Illinois EPA shall provide me with a final invoice for services provided until the date of receipt of such notification.

To the best of my knowledge and belief, this request and all attachments are true, accurate and complete. I hereby certify that I have the authority to enter into this agreement.

RA's Signature: [Signature] Date: 4-6-2004

*In addition to the fees applicable under this Services Agreement, the recipient of a No Further Remediation Letter must pay to the Illinois EPA a No Further Remediation Assessment in the amount of the lesser of \$2500 or an amount equal to the costs incurred by the Illinois EPA under this Agreement (35 IAC 740.615).

III. Project Objectives:

A	<p>Release Letter Requested Please complete one of the subsections by checking applicable boxes and including other information (if necessary, additional information may be attached to this application form):</p>	<p><input type="checkbox"/> Comprehensive No Further Remediation ("NFR") Letter</p> <p><input checked="" type="checkbox"/> Focused NFR Letter</p> <p>Identify the focused contaminants of concern by checking the applicable box(es):</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> Volatiles</td> <td><input checked="" type="checkbox"/> BTEX</td> <td><input type="checkbox"/> PCBs</td> <td><input checked="" type="checkbox"/> Metals</td> </tr> <tr> <td><input checked="" type="checkbox"/> Semivolatiles</td> <td><input checked="" type="checkbox"/> PNAs</td> <td><input type="checkbox"/> Pesticides</td> <td></td> </tr> </table> <p>Other (identify): <u>methanol</u></p> <hr/> <p><input type="checkbox"/> 4(y) Letter</p> <p>Identify the focused contaminants of concern by checking the applicable box(es):</p> <table border="0"> <tr> <td><input type="checkbox"/> Volatiles</td> <td><input type="checkbox"/> BTEX</td> <td><input type="checkbox"/> PCBs</td> <td><input type="checkbox"/> Metals</td> </tr> <tr> <td><input type="checkbox"/> Semivolatiles</td> <td><input type="checkbox"/> PNAs</td> <td><input type="checkbox"/> Pesticides</td> <td></td> </tr> </table> <p>Other (identify): _____</p> <p>Identify the media of concern by checking applicable boxes:</p> <table border="0"> <tr> <td><input type="checkbox"/> Soil</td> <td><input type="checkbox"/> Sediments</td> <td>Other: _____</td> </tr> </table> <p>Identify the actions (e.g., drum removal, spill response, etc.):</p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<input checked="" type="checkbox"/> Volatiles	<input checked="" type="checkbox"/> BTEX	<input type="checkbox"/> PCBs	<input checked="" type="checkbox"/> Metals	<input checked="" type="checkbox"/> Semivolatiles	<input checked="" type="checkbox"/> PNAs	<input type="checkbox"/> Pesticides		<input type="checkbox"/> Volatiles	<input type="checkbox"/> BTEX	<input type="checkbox"/> PCBs	<input type="checkbox"/> Metals	<input type="checkbox"/> Semivolatiles	<input type="checkbox"/> PNAs	<input type="checkbox"/> Pesticides		<input type="checkbox"/> Soil	<input type="checkbox"/> Sediments	Other: _____
<input checked="" type="checkbox"/> Volatiles	<input checked="" type="checkbox"/> BTEX	<input type="checkbox"/> PCBs	<input checked="" type="checkbox"/> Metals																		
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<input type="checkbox"/> Semivolatiles	<input type="checkbox"/> PNAs	<input type="checkbox"/> Pesticides																			
<input type="checkbox"/> Soil	<input type="checkbox"/> Sediments	Other: _____																			
B	<p>Identify any support services being sought from the Illinois EPA in addition to the review and evaluation services (if necessary, additional information may be attached to this application form):</p>	<p><input checked="" type="checkbox"/> No additional support services are being sought</p> <p><input type="checkbox"/> Assistance with community relations</p> <p><input type="checkbox"/> Environmental Remediation Tax Credit Budget Review (Attach DRM-4 application)</p> <p><input type="checkbox"/> Sample collection and analyses</p> <p><input type="checkbox"/> Other (identify): _____</p>																			
C	<p>Anticipated Schedule</p>	<table border="1"> <thead> <tr> <th>SRP Document</th><th>Projected Date of Receipt by Illinois EPA</th></tr> </thead> <tbody> <tr> <td>Site Investigation Report</td><td>Feb. 2004</td></tr> <tr> <td>Remediation Objectives Report</td><td>Feb. 2004</td></tr> <tr> <td>Remedial Action Plan</td><td>Feb. 2004</td></tr> <tr> <td>Remedial Action Completion report</td><td>Feb. 2004</td></tr> </tbody> </table>	SRP Document	Projected Date of Receipt by Illinois EPA	Site Investigation Report	Feb. 2004	Remediation Objectives Report	Feb. 2004	Remedial Action Plan	Feb. 2004	Remedial Action Completion report	Feb. 2004									
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D	<p>Identify the current and post-remediation uses of the remediation site (if necessary, additional information may be attached to this application form):</p>	<p>Current Use: Industrial/Commercial</p> <hr/> <p>Post-Remediation Use: Industrial/Commercial</p>																			

This page can be completed online.

The Illinois EPA is authorized to require this information under Title XVII of the Environmental Protection Act (415 ILCS 5/58.1(a)(2)). Failure to disclose this information may prevent this form from being processed and could also prevent acceptance into the Site Remediation Program. This form has been approved by the Forms Management Center.

Illinois Environmental Protection Agency
Leaking Underground Storage Tank Program
Election to Proceed under the Site Remediation Program
(this form applies only to owners/operators electing to conduct remediation under SRP)

A. SITE IDENTIFICATION

IEMA #: H20031887 IEPA Inventory ID #: 0316575051
Site Name: MRC Polymers, Inc.
Site Address (Not a P.O. Box): 3307 S. Lawndale Avenue
City: Chicago County: Cook

B. CERTIFICATION

In accordance with Section 58.1(b) of the Environmental Protection Act ("Act") (415 ILCS 5/58.1(b)), the following statement of election is made:

As the Owner and/or Operator of this tank system, I/we am/are electing to proceed with remediation in accordance with Title XVII of the Act (415 ILCS 5/58 et seq.) and 35 Illinois Administrative Code ("35 IAC") Part 740. I/we am/are aware of the following:

Completion of the Site Remediation Program ("SRP") Application and Service Agreement Form (DRM-1) is required to enroll into the Program.

I/we am/are subject to an advance partial payment for requested services in the amount of \$500 or request that the Illinois Environmental Protection Agency ("Illinois EPA") estimate the total costs to provide the requested services and assess an advance partial payment not to exceed \$5,000 or one-half of the total anticipated costs of the Illinois EPA, whichever is less. If the second option is selected, Form DRM-3 must be completed and attached to the application and service agreement.

The advance partial payment is not refundable.

I/we am/are subject to payments for costs incurred by the Illinois EPA for the performance of services under the SRP once the advance partial payment has been depleted. In addition, a No Further Remediation ("NFR") letter assessment fee is required based on Illinois EPA-incurred costs up to a maximum of \$2,500.

I/we am/are no longer eligible to seek reimbursement from the Underground Storage Tank Fund for costs incurred after the date the SRP Application and Service Agreement Form (DRM-1) is signed by the Remediation Applicant and accepted by the Illinois EPA.

I/we am/are subject to the report requirements of 35 Ill. Adm. Code Part 740, which includes, but not limited to, submitting a Site Investigation Report, Remediation Objectives Report, Remedial Action Plan, and Remedial Action Completion Report.

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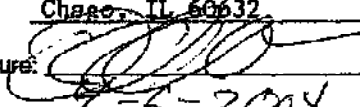
All plans and reports submitted for review and evaluation must be prepared by, or under the supervision of, an Illinois licensed professional engineer. Any plan or report submitted to the Illinois EPA for review and evaluation must be accompanied by Form DRM-2.

That an NFR letter issued pursuant to Section 57.10 of the Act (LUST) signifies that all statutory and regulatory corrective action requirements applicable to the occurrence have been complied with; whereas, an NFR letter issued pursuant to Section 58.10 of the Act (SRP) signifies a release from further responsibilities under the Act in performing the approved remedial action and shall be considered prima facie evidence that the site does not constitute a threat to human health and the environment. The NFR letter issued pursuant to Section 58.10 of the Act may not address all recognized environmental conditions or contaminants of concern subject to LUST regulations. Therefore, the content of the NFR letter issued pursuant to Section 58.10 of the Act may reflect that fact.

If we are responsible for any environmental conditions or contaminants of concern associated with a LUST release not addressed in the NFR letter issued pursuant to Section 58.10 of the Act, including, but not limited to, off-site soil and/or groundwater contamination.

If we are also the Remediation Applicant under the SRP, we further agree that any NFR letter issued pursuant to Section 58.10 of the Act is voidable by the Illinois EPA if we fail to address such conditions or contaminants as required by law.

C. SIGNATURES

Owner:	Operator:
Name: <u>MBC Polymers, Inc.</u>	Name: _____
Contact: <u>Daniel Ebberhart</u>	Contact: _____
Address: <u>3307 S. Lawndale</u>	Address: _____
<u>Chicago, IL 60632</u>	_____
Signature: 	Signature: _____
Date: <u>7-6-2004</u>	Date: _____
Phone: <u>773-890-5505</u>	Phone: _____

Submit this form to:

Illinois Environmental Protection Agency
Bureau of Land - #24
LUST Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Illinois Environmental Protection Agency
Bureau of Land
Remedial Project Management Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

FOR ILLINOIS EPA USE:
LOG NO. _____

Site Remediation Program Form (DRM-2)
(To Be Submitted with all Plans and Reports)

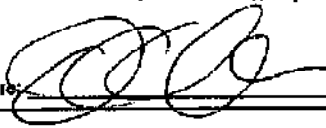
I. Site Identification:

Site Name: MRC Polymers, Inc.
Street Address: 3307 South Lawndale Avenue
City: Chicago Illinois Inventory I. D. Number: 0316575051
IEMA Incident Number: H20031687

II. Remediation Applicant:

Applicant's Name: Daniel Ebberhart Company: MRC Polymers, Inc.
Street Address: 3307 S Lawndale
City: Chicago State: IL ZIP Code: 60632 Phone: 773-890-5505

I hereby request that the Illinois EPA review and evaluate the attached project documents in accordance with the terms and conditions of the Environmental Protection Act (415 ILCS 5), implementing regulations, and the review and evaluation services agreement.

Remediation Applicant's Signature:  Date: 4-5-2004

III. Contact Person:

Contact's Name: _____ Company: _____
Street Address: _____
City: _____ State: _____ ZIP Code: _____ Phone: _____

IV. Review & Evaluation Licensed Professional Engineer or Geologist ("RELPEG"), if applicable:

RELPEG's Name: _____ Company: _____
Street Address: _____
City: _____ State: _____ ZIP Code: _____ Phone: _____

Registration Number: _____ License Expiration Date: _____

All information submitted is available to the public except when specifically designated by the Remediation Applicant to be treated confidentially as a trade secret or secret process in accordance with the Illinois Compiled Statutes, Section 7(a) of the Environmental Protection Act, applicable Rules and Regulations of the Illinois Pollution Control Board and applicable Illinois EPA rules and guidelines. The Illinois EPA is authorized to require this information under Sections 415 ILCS 5/58 - 58.12 of the Environmental Protection Act and regulations promulgated thereunder. Disclosure of this information is required as a condition of participation in the Site Remediation Program. Failure to do so may prevent this form from being processed and could result in your plan(s) or report(s) being rejected. This form has been approved by the Permit Management Center.

IV. Written Permission from the Property Owner (check one of the applicable boxes and provide additional information):

<input checked="" type="checkbox"/>	RA is the property owner of the remediation site identified in Section I of this application.
<input type="checkbox"/>	RA is not the property owner of the remediation site identified in Section I of this application.
Property Owner's Name: _____	
Title: _____	
Company: _____	
Street Address: _____	
City: _____	State: _____ ZIP Code: _____ Phone: _____
<p>I hereby certify that the Remediation Applicant has my permission to enroll the site identified in Section I of this application into the Illinois EPA Site Remediation Program. I certify that the Remediation Applicant and designated representatives have permission to enter upon the indicated premises for the purpose of conducting remedial investigations or activities.</p>	
Owner's Signature: _____ Date: _____	
<p>For multiple property owners, attach additional sheets containing all the information above along with a signed, dated certification for each.</p>	

V. Advance Partial Payment:

<p>The Remediation Applicant shall select <u>one</u> of the following advance partial payment plans:</p>	
<input checked="" type="checkbox"/>	<p>Plan 1: A \$500 advance partial payment is included with this application. Please make the check payable to: "Illinois Environmental Protection Agency". Please include "For Deposit in the Hazardous Waste Fund" and the Remediation Applicant's FEIN or SSN on the check; or</p>
<input type="checkbox"/>	<p>Plan 2: Request that the Illinois EPA determine the appropriate partial payment (i.e., approximately one-half of the total anticipated costs of the Illinois EPA, not to exceed \$5,000). A completed DRM-3 form ("Request for Assessment of Advance Partial Payment for Anticipated Services") must accompany this application so that the Illinois EPA may determine the appropriate advance partial payment specific to the services requested.</p>
<p>NOTE: Illinois EPA cannot refund payments without a legislative appropriation. Payment under Plan 1 accelerates the review process but increases the risk of forfeiting the payment if the applicant is ineligible. Payment under Plan 2 may result in a larger advance partial payment when a final determination is made on the application, but it reduces the risk of forfeiture.</p>	

A. If this application contains plans and reports for review and evaluation by the Illinois EPA, a completed Form DRM-2 must also accompany this submittal.

The Illinois EPA is authorized to require this information under Section 415 ILCS 5/58-58 (2) of the Environmental Protection Act and regulations promulgated thereunder. Disclosure of this information is required as a condition of participation in the Site Remediation Program. Failure to do so may prevent this form from being processed and could result in your application being rejected. This form has been approved by the Forms Management Center. All information submitted as part of this Application is available to the public except when specifically designated by the Remediation Applicant to be treated confidentially as a trade secret or secret process in accordance with the Illinois Compiled Statutes, Section 7(n) of the Environmental Protection Act, applicable Rules and Regulations of the Illinois Pollution Control Board and applicable Illinois EPA rules and guidelines.

V. Project Documents Being Submitted:

Document Title: <u>SIR-Focused & RACR</u>	Date of Preparation of Plan or Report: <u>2/6/04</u>
Prepared by: <u>Pioneer Eng. & Env. Services, Inc.</u>	Prepared for: <u>MRC Polymers</u>
Type of Document Submitted: <input type="checkbox"/> Site Investigation Report - Comprehensive <input checked="" type="checkbox"/> Site Investigation Report - Focused <input checked="" type="checkbox"/> Remediation Objectives Report-Tier 1 or 2 <input type="checkbox"/> Remediation Objectives Report-Tier 3 <input type="checkbox"/> Remedial Action Plan <input checked="" type="checkbox"/> Remedial Action Completion Report	
Sampling Plan Health and Safety Plan Community Relations Plan Risk Assessment Contaminant Fate & Transport Modeling Environmental Remediation Tax Credit - Budget Plan Review Other: _____	

Document Title: _____	Date of Preparation of Plan or Report: _____
Prepared by: _____	Prepared for: _____
Type of Document Submitted: <input type="checkbox"/> Site Investigation Report - Comprehensive <input type="checkbox"/> Site Investigation Report - Focused <input type="checkbox"/> Remediation Objectives Report-Tier 1 or 2 <input type="checkbox"/> Remediation Objectives Report-Tier 3 <input type="checkbox"/> Remedial Action Plan <input type="checkbox"/> Remedial Action Completion Report	
Sampling Plan Health and Safety Plan Community Relations Plan Risk Assessment Contaminant Fate & Transport Modeling Environmental Remediation Tax Credit - Budget Plan Review Other: _____	

VI. Professional Engineer's or Geologist's Seal or Stamp:

I attest that all site investigations or remedial activities that are the subject of this plan(s) or report(s) were performed under my direction, and this document and all attachments were prepared under my direction or reviewed by me, and to the best of my knowledge and belief, the work described in the plan and report has been designed or completed in accordance with the Illinois Environmental Protection Act (415 ILCS 5), 35 Ill. Adm. Code 740, and generally accepted engineering practices or principles of professional geology, and the information presented is accurate and complete.

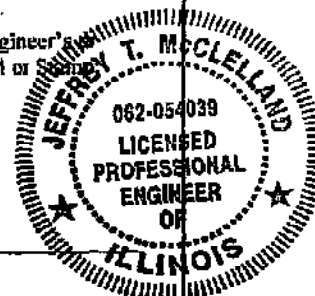
Engineer or Geologist Name: Jeff McClelland

Professional Engineer's Seal or Geologist's Seal or Stamp

Company: Pioneer Phone: 312-587-1021

Registration Number: 062-054039

Signature: [Signature] License Expiration Date: 11/05



Note: The authority of a Licensed Professional Geologist to certify documents submitted to the Illinois Environmental Protection Agency for review and evaluation pursuant to Title XVII of the Environmental Protection Act is limited to Site Investigation Reports (415 ILCS 58.7(f), as amended by P.A. 92-0735, effective July 25, 2002). A Licensed Professional Geologist cannot certify Remediation Objectives Reports, Remedial Action Plans or Remedial Action Completion Reports.

APPENDIX C
SAMPLING PROTOCOLS & SOIL BORING LOGS

SUBSURFACE SOIL SAMPLING PROTOCOL

Subsurface samples are collected by employing various soil boring techniques based on certain site specific conditions. Soil borings are performed using a Hollow or Solid Stem (site specific) auger with split-spoon sampling techniques, a hydraulic percussive split-spoon sampler, a percussive Macro-Core® barrel sampler, and/or a stainless steel hand auger. The soil sampling activities are conducted in accordance with American Society of Testing and Materials (ASTM) standards (ASTM:D 1586). Soil samples are collected with a stainless steel hand auger, a split-spoon sampler, and/or a Macro-Core® sampler at 2-3 foot intervals depending on the specific method used. In the split-spoon sampling procedures, a split-barrel sampler having either a 2-inch or 1-3/16 inch outside diameter, an inside diameter of 1-3/8 or 7/8 inches, and a length of 2.5 or 3 feet is driven into the soil to collect a representative and undisturbed sample. In the Macro-Core® barrel sampling technique, a stainless steel barrel having a 2-inch outside diameter, an inside diameter of 1-1/2 inches, and a length of 2 or 3 feet is fitted with a PVC liner and is driven into the soil to collect a representative and undisturbed sample.

The drilling is directed by a Pioneer Environmental Field Project Geologist/Engineer, who logs geologic materials encountered during drilling, field screens auger cuttings and soil samples, observes the drilling activities, and supervises sample collection. The soil borings are sampled across continuous intervals from ground surface to the desired sampling depth, unless otherwise noted, and samples obtained from each interval are logged according to their predominant geological characteristics and divided into two representative portions by Pioneer personnel, either for field screening or possible laboratory analysis. Each sample is examined in the field for odor and visual evidence of hydrocarbon or other organic contamination. The field observations are noted in the soil boring logs that are included in the Appendices.

The sample portion utilized for field screening is placed into an unused, air-tight plastic bag which is sealed and dedicated to that discrete sample. The sample is allowed to equilibrate to the surrounding air temperature and the headspace above each sample is screened for volatile organic compounds (VOCs) using either a Photovac™ MP-1000 handheld air monitor / photoionization detector (PID) or Photovac™ MicroFID IS-3000 handheld air monitor / flame ionization detector (FID), depending on the nature of the targeted contaminants. These devices are sensitive to a variety of petroleum/hazardous substances, including those typically targeted in subsurface investigations, and provide qualitative indications of the relative concentrations of organic contaminants trapped in the sample matrix. The headspace is screened by inserting the PID/FID probe into the space above the soil and recording the maximum reading of the instrument. The results of the headspace screening are also listed on the soil boring logs.

When soil samples will be laboratory tested for VOCs, one of two field sampling methods are used as required by US EPA's SW-846 Method 5035. 1) A representative portion of the sample collected in the field is placed in an EnCore™ sampler, or equivalent, immediately after collection, with the appropriate quantity and volume of the containers determined by the scope of work and field conditions. The EnCore™ samplers, or equivalent, are delivered to the laboratory within 48 hours of sample collection. 2) A representative measured portion of the sample collected in the field is transferred directly from the sampling device(s) to pre-labeled, laboratory-provided glassware with appropriate preservative (either sodium bisulfate-for samples with estimated VOC concentrations less than 200 ppb; or methanol-for samples with estimated VOC concentrations greater than 200 ppb) immediately after sample collection.

Any soil samples chosen for possible analysis are packed in appropriate containers, properly labeled, designated for possible analysis, and stored in a cooler on ice to preserve the integrity of the sample. The samples are shipped in a cooler on ice via a delivery service overnight to an independent laboratory under standard chain-of-custody procedures, for possible analysis of the appropriate compounds targeted in the investigation. Samples are selected based on the scope of work, field observations (i.e. visual/odor observations, elevated PID/FID readings, etc.), other site specific conditions, and the judgment of the Pioneer Field Project Geologist/Engineer.

SUBSURFACE SOIL SAMPLING PROTOCOL (cont.)

Drill cuttings and liquids generated are left at the borehole. All boreholes are decommissioned in accordance with applicable Illinois Department of Public Health guidelines. When required, these spoils are contained in 55 gallon Type 17H drums. Decontamination procedures for the drilling equipment consists of steam cleaning the augers after each boring using a biodegradable detergent and high-pressure steam rinse. The split-spoon samplers are decontaminated between each sample interval by washing in a solution of Alconox and water, and triple rinsing with clean heated water.

Any deviations to or modifications of this standard protocol will be described on a site by site basis.

EXCAVATION CLOSURE SAMPLING PROTOCOL

The following describes the general procedures followed by Pioneer Environmental, Inc. (Pioneer) when sampling soil from excavations created during site remediation. It should be mentioned that this protocol follows generally accepted engineering and industry procedures and is consistent with standard Illinois EPA guidelines which are currently used in practice.

A minimum of one (1) grab sample of soil is collected from each of the sidewalls and two (2) grab samples are obtained from the base of the excavation using a stainless steel hand trowel. All sidewall grab samples of soil are collected at locations that represent approximately two-thirds (2/3) of the total depth of the excavation.




In general, a minimum of six (6) soil samples are collected from the excavation, however, this number may be increased depending upon the actual size of the excavation created during site remediation. As a general rule, any excavation sidewall that exceeds 20 feet in length will require two (2) soil samples to be collected at approximately equally spaced intervals. Accordingly, this will also increase the required number of base samples to be collected.


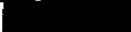

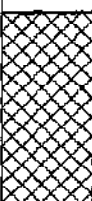

The soil samples are packed into properly labeled laboratory provided glass containers, stored in a cooler on ice, and then shipped overnight to an independent laboratory to be analyzed for the appropriate Illinois EPA targeted compounds under standard chain of custody procedures. The stainless steel hand trowel is decontaminated between each sampling interval with a solution of Alconox and then thoroughly rinsed with clean water.



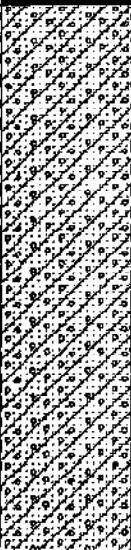


The chemical parameters for which the soil samples will be analyzed depend on the specific substance(s) that were stored in the UST(s) or other potential sources which contributed the contamination. The specific analyses are governed by the guidelines set forth in 35 Illinois Administrative Code Part 732 for USTs or are determined on a site by site basis.





When soil samples will be laboratory tested for VOCs, one of two field sampling methods are used as required by US EPA's SW-846 Method 5035. 1) A representative portion of the sample collected in the field is placed in an EnCore™ sampler, or equivalent, immediately after collection, with the appropriate quantity and volume of the containers determined by the scope of work and field conditions. The EnCore™ samplers, or equivalent, are delivered to the laboratory within 48 hours of sample collection. 2) An appropriate weight of a representative portion of the sample collected in the field is placed in laboratory-provided glassware, immediately after collection, and then the appropriate preservative is added, either sodium bisulfate-for samples with estimated VOC concentrations less than 200 ppb; or methanol-for samples with estimated VOC concentrations greater than 200 ppb.


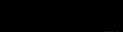
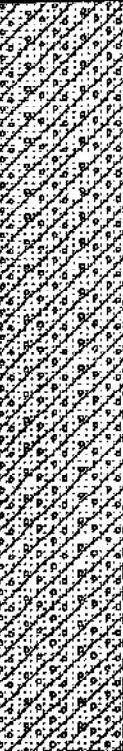


Any deviations to or modifications of this standard protocol will be described on a site by site basis.

			Boring Log				Boring No.: B-1
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/10/02
							Date End: 9/10/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
-	20%			Asphalt		Asphalt	No odor No visual
				Fill		Gravel and crushed concrete FILL with trace sand and cinders Boring terminated at 1.5 feet (concrete)	
			3				
			6				
			9				
			12				
			15				
Completion Notes:						Drill Rig:	SIMCO EarthProbe 200
						Driller:	P. Vrhovac
						Geologist:	S. Strothoff
						LUST Incident No:	-
Water Depth While Drilling: ND				Water Depth After Drilling: NA		Project Number: 02448B	Page 1

				Boring Log			Boring No.: B-2
				Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois			Date Begin: 9/10/02 Date End: 9/10/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
				Asphalt		Asphalt	No odor No visual
6.1	30%		3	Fill		Gravel and crushed concrete FILL with trace sand, brown silty clay and cinders Slightly moist, Loose	
10.9	90%		6				
18.9	95%		9	CL		Trace cinders and glass at 7.5' Moist, Loose	
4.7	40%		12				
3.8	100%		15				
Boring terminated at 15 feet							
Completion Notes: Hatched pattern indicates sample analyzed.					Drill Rig: SIMCO EarthProbe 200 Driller: P. Vrhovac Geologist: S. Strothoff LUST Incident No: -		
Water Depth While Drilling: 10'		Water Depth After Drilling: NA			Project Number: 02448B		Page 1



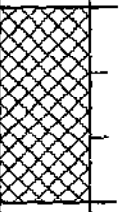

 PIONEER Engineering & Environmental Services, Inc.				Boring Log			Boring No.: B-3
				Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois			Date Begin: 9/10/02 Date End: 9/10/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
				Asphalt		Asphalt	No odor No visual
2.6	90%		3	Fill		Gravel and crushed concrete FILL with trace sand, brown silty clay and cinders Slightly moist, Loose	
13.8	100%		6				
28.1	100%		9				
3.6	100%		12	CL		Tan and gray silty CLAY Moist, Stiff	
			15			Boring terminated at 12 feet	
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: BOSCH Sampler Driller: P. Vrhovac Geologist: S. Strothoff LUST Incident No: -	
Water Depth While Drilling: 10'				Water Depth After Drilling: NA		Project Number: 02448B	Page 1


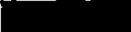
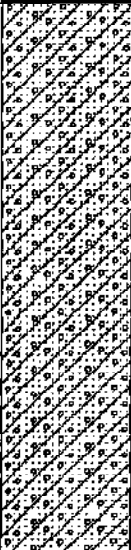


 PIONEER Engineering & Environmental Services, Inc.			Boring Log				Boring No.: B-4	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/10/02 Date End: 9/10/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
				Asphalt		Asphalt	No odor No visual	
3.3	30%		3	Fill		Gravel and crushed concrete FILL with trace sand, brown silty clay and cinders Slightly moist, Loose		
2.4	60%		6					
1.8	90%		9					
3.4	100%		12	CL		Tan and gray silty CLAY Moist, Stiff		
			15			Boring terminated at 12 feet		
Completion Notes:						Drill Rig: BOSCH Sampler		
						Driller: P. Vrhovac		
						Geologist: S. Strothoff		
						LUST Incident No: -		
Water Depth While Drilling: 10'			Water Depth After Drilling: NA			Project Number: 02448B		Page 1

 PIONEER Engineering & Environmental Services, Inc.				Boring Log			Boring No.: B-5
				Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois		Date Begin: 9/10/02	
						Date End: 9/10/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
				Asphalt		Asphalt	No odor No visual
5.6	75%		3	Fill		Dark brown to black silty clay FILL with trace sand, gravel, cinders and glass Slightly moist, Loose	
5.9	75%		6				
18.7	60%		9				
158.7	75%		12				
5.2	95%		15	CL		Tan and gray silty CLAY Moist, Stiff Grades to gray silty CLAY at 14.5', Moist, Stiff Boring terminated at 15 feet	

Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig:	SIMCO EarthProbe 200
	Driller:	P. Vrhovac
	Geologist:	S. Strothoff
	LUST Incident No:	-

Water Depth While Drilling: 9.5'	Water Depth After Drilling: NA	Project Number: 02448B	Page 1
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			<h3>Boring Log</h3>				Boring No.: B-6	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/10/02 Date End: 9/10/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
4.0	50%			Asphalt		Asphalt	No odor No visual	
			3	Fill		Dark brown to black silty FILL with trace sand, gravel, cinders and glass Slightly moist, Loose		
3.7	75%		6					
20.4	75%		9	CL		Greenish-gray silty CLAY Slightly moist to moist, Stiff		
5.5	100%		12			Grades to gray silty CLAY at 10.5' Moist, Stiff		
			15			Boring terminated at 12 feet		
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: SIMCO EarthProbe 200		
						Driller: P. Vrhovac		
						Geologist: S. Strothoff		
						LUST Incident No: -		
Water Depth While Drilling: 9.5'				Water Depth After Drilling: NA		Project Number: 02448B		Page 1



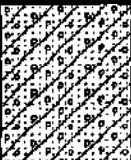

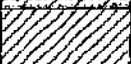



				Boring Log			Boring No.: B-7
				Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois			Date Begin: 9/10/02 Date End: 9/10/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
				Asphalt		Asphalt	No odor No visual
4.2	90%		3	Fill		Gravel and crushed concrete FILL with trace sand, brown silty clay and cinders Slightly moist, Loose	
4.3	75%		6				
66.1	60%		9	ML		Brown grading to gray clayey SILT Slightly moist to moist	
2.8	100%		12				
			15			Boring terminated at 12 feet	




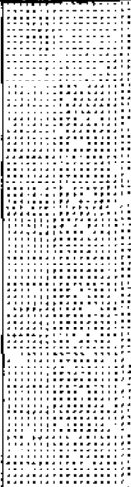

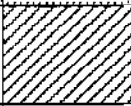
Completion Notes:
 Hatched pattern indicates sample analyzed.

Drill Rig:	SIMCO EarthProbe 200
Driller:	P. Vrhovac
Geologist:	S. Strothoff
LUST Incident No:	-








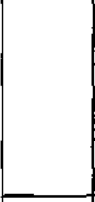

Water Depth While Drilling: ND Water Depth After Drilling: NA


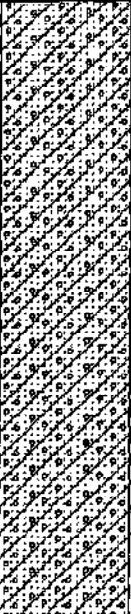
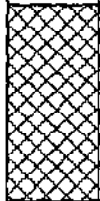
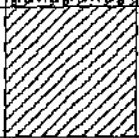
Project Number: 02448B	Page 1
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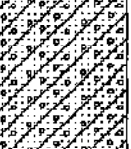

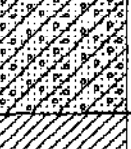
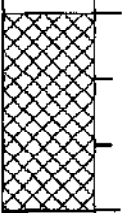
 PIONEER Engineering & Environmental Services, Inc.			Boring Log				Boring No.: B-8
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/10/02
							Date End: 9/10/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
				Asphalt		Asphalt	No odor No visual
4.7	50%					Brown sandy silty FILL with trace cinders and red brick	
	0%		3	Fill		(pushing stone)	
			6				
3.7	90%					Tan and gray silty CLAY Slightly moist, Stiff	
			9	CL			
17.4	95%					Gray clayey SILT Slightly moist	
			12	ML			
						Gray silty CLAY Slightly moist, Stiff	
5.0	100%			CL			
			15			Boring terminated at 15 feet	
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: SIMCO EarthProbe 200	
						Driller: P. Vrhovac	
						Geologist: S. Strothoff	
						LUST Incident No: -	
Water Depth While Drilling: ND Water Depth After Drilling: NA				Project Number: 02448B		Page 1	

 PIONEER Engineering & Environmental Services, Inc.			Boring Log				Boring No.: B-9	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/10/02 Date End: 9/10/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
0.8	50%			Asphalt		Asphalt	No odor No visual Faint petroleum odor No visual	
				Fill		Gravel FILL with trace sand, brown silty clay and cinders Slightly moist, Loose		
1.0	100%		3	SP		Tan medium-grained SAND Slightly moist, Loose		
6.3	100%		6					
			9					
79.3	100%			CL		Tan and gray silty CLAY Slightly moist, Stiff		
			12			Boring terminated at 12 feet		
			15					

Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig: SIMCO EarthProbe 200		
	Driller: P. Vrhovac		
	Geologist: S. Strothoff		
	LUST Incident No: -		
Water Depth While Drilling: ND	Water Depth After Drilling: NA	Project Number: 02448B	Page 1


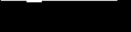
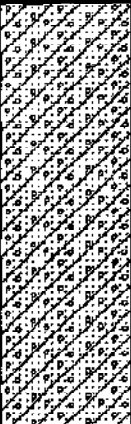

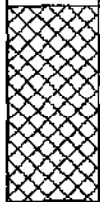
			Boring Log				Boring No.: B-10
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/10/02
							Date End: 9/10/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
417.8	50%		3	Asphalt		Asphalt	No odor No visual
38.5	75%		6	Fill		Brown sandy silty FILL with trace brick, gravel and cinders Slightly moist, Loose	
4.8	100%		9	CL		Tan and gray silty CLAY Slightly moist, Stiff	
4.4	100%		12	ML		Gray clayey SILT Slightly moist	
			15			Boring terminated at 12 feet	
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: SIMCO EarthProbe 200	
						Driller: P. Vrhovac	
						Geologist: S. Strothoff	
						LUST Incident No: -	
Water Depth While Drilling: ND Water Depth After Drilling: NA				Project Number: 02448B		Page 1	

 PIONEER Engineering & Environmental Services, Inc.			Boring Log				Boring No.: B-11	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/10/02 Date End: 9/10/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
				Asphalt		Asphalt	No odor No visual	
4.7	60%			Fill		Brown sandy silty FILL with trace brick, gravel and cinders Slightly moist, Loose		
13.8	75%		3					
			6					
6.1	100%		9					
3.4	100%			CL		Tan and gray silty CLAY Slightly moist, Stiff		
			12			Boring terminated at 12 feet		
			15					
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: SIMCO EarthProbe 200		
						Driller: P. Vrhovac		
						Geologist: S. Strothoff		
						LUST Incident No: -		
Water Depth While Drilling: ND				Water Depth After Drilling: NA		Project Number: 02448B		Page 1




				Boring Log			Boring No.: B-12
				Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois			Date Begin: 9/12/02
							Date End: 9/12/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
				Concrete		Concrete	No odor No visual
5.3	25%			Fill		Dark brown and black sandy clayey silt FILL with cinders, slag and gravel Slightly moist, Loose	
			3				
10.3	90%			CL			
			6				
1.8	90%			ML		Brown silty CLAY grading to tan and gray silty CLAY Slightly moist, Stiff	
			9				
3.7	100%					Gray clayey SILT Slightly moist, Stiff	
			12			Boring terminated at 12 feet	
			15				






Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig:	SIMCO EarthProbe 200
	Driller:	K. Conlon
	Geologist:	S. Strothoff
	LUST Incident No:	-

Water Depth While Drilling: ND	Water Depth After Drilling: NA	Project Number: 02448B	Page 1
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			<h2 style="text-align: center;">Boring Log</h2>				Boring No.: B-13	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/12/02 Date End: 9/12/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
				Asphalt		Asphalt	No odor No visual	
0.6	10%			Fill		Dark brown sandy clayey silt FILL with gravel, cinders and glass Slightly moist, Loose		
			3					
0.9	75%			CL		Brown and gray silty CLAY Slightly moist, Stiff		
			6					
21.8	75%							
9.9	90%							
			12			Boring terminated at 12 feet		
			15					





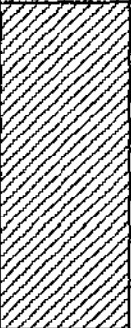
Completion Notes: Hatched pattern indicates sample analyzed.		Drill Rig: BOSCH Sampler	
		Driller: K. Conlon	
		Geologist: S. Strothoff	
		LUST Incident No: -	
Water Depth While Drilling: ND Water Depth After Drilling: NA		Project Number: 02448B	Page 1

 PIONEER Engineering & Environmental Services, Inc.			Boring Log				Boring No.: B-14	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/12/02 Date End: 9/12/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
-	10%			Concrete		Concrete	No odor No visual	
				GP		Medium GRAVEL with trace sand Slightly moist, Loose		
						Boring terminated at 2 feet due to auger refusal		
			3					
			6					
			9					
			12					
			15					
Completion Notes:						Drill Rig: BOSCH Sampler		
						Driller: K. Conlon		
						Geologist: S. Strothoff		
						LUST Incident No: -		
Water Depth While Drilling: ND Water Depth After Drilling: NA						Project Number: 02448B		Page 1

				Boring Log			Boring No.: B-15
				Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois			Date Begin: 9/12/02 Date End: 9/12/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
2.3	20%		3	Concrete		Concrete	No odor No visual
1.3	75%		6	Fill		Dark brown and black sandy clayey silt FILL with gravel, cinders and glass Slightly moist, Loose	
1.2	90%		9	CL		Black silty CLAY Slightly moist, Stiff	
			12			Boring terminated at 9 feet	
			15				

Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig:	BOSCH Sampler
	Driller:	K. Conlon
	Geologist:	S. Strothoff
	LUST Incident No:	-

Water Depth While Drilling: ND	Water Depth After Drilling: NA	Project Number: 02448B	Page 1
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 PIONEER Engineering & Environmental Services, Inc.			Boring Log				Boring No.: B-16
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/12/02 Date End: 9/12/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
23.3	50%		3	Concrete		Concrete	No odor No visual
0	50%		6	Fill		Dark brown and black sandy clayey silt FILL with gravel, cinders and glass Slightly moist, Loose	
3.2	75%		9	CL		Black silty CLAY Slightly moist, Stiff	
0.6	90%		12			Grades to tan and gray clayey SILT at 10' Slightly moist, Stiff	
			15			Boring terminated at 12 feet	

Completion Notes:
Hatched pattern indicates sample analyzed.

Drill Rig: **BOSCH Sampler**







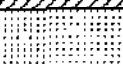

Driller: **K. Conlon**




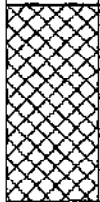

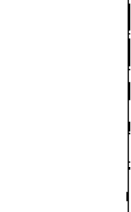
Geologist: **S. Strothoff**




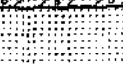
LUST Incident No: **-**






Water Depth While Drilling: 10' Water Depth After Drilling: NA






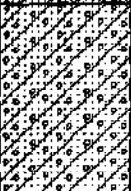

Project Number: 02448B Page 1

				Boring Log			Boring No.: B-17
				Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois			Date Begin: 9/12/02 Date End: 9/12/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
50.8	75%		3	Concrete		Asphalt	No odor No visual
6.4	75%		6	Fill		Brown sandy clayey silt FILL with gravel, cinders and red brick Slightly moist, Loose	
4.6	100%		9	CL		Black silty CLAY Slightly moist, Stiff Grades to tan and gray silty CLAY at 8.5' Slightly moist to moist, Stiff	
6.5	100%		12	SP		Coarse-grained SAND Moist, Loose	
			12	CL		Tan and gray silty CLAY Slightly moist, Stiff	
			15			Boring terminated at 12 feet	
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: SIMCO EarthProbe 200 Driller: K. Conlon Geologist: S. Strothoff LUST Incident No: -	
Water Depth While Drilling: 10'				Water Depth After Drilling: NA		Project Number: 02448B	Page 1




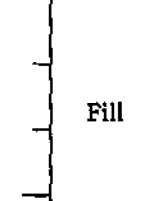
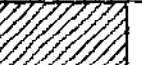

 PIONEER Engineering & Environmental Services, Inc.			Boring Log				Boring No.: B-18
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/12/02 Date End: 9/12/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
14.4	75%			Concrete		Asphalt	No odor No visual
			3	Fill		Brown sandy clayey silt FILL with cinders and red brick Slightly moist, Loose	
5.8	100%		6				
6.8	100%		9	CL		Black silty CLAY Slightly moist, Stiff Grades to tan and gray silty CLAY at 8.5' Slightly moist to moist, Stiff	
6.3	100%		12	CL		Tan and gray silty CLAY Slightly moist, Stiff Boring terminated at 12 feet	
			15				
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: SIMCO EarthProbe 200 Driller: K. Conlon Geologist: S. Strothoff LUST Incident No: -	
Water Depth While Drilling: ND Water Depth After Drilling: NA				Project Number: 02448B		Page 1	

			Boring Log				Boring No.: B-19
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/12/02
							Date End: 9/12/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
				Concrete		Asphalt	No odor No visual
9.6	50%			Fill		Brown sandy clayey silt FILL with cinders and red brick Slightly moist, Loose	
9.5	75%		3	SP		Tan medium-grained SAND Slightly moist, Loose	
						Boring terminated at 4 feet due to obstruction	
			6				
			9				
			12				
			15				
Completion Notes:						Drill Rig: SIMCO EarthProbe 200	
						Driller: K. Conlon	
						Geologist: S. Strothoff	
						LUST Incident No: -	
Water Depth While Drilling: ND				Water Depth After Drilling: NA		Project Number: 02448B	Page 1

			<h2 style="text-align: center;">Boring Log</h2>				Boring No.: B-20	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/12/02 Date End: 9/12/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
14.8	50%			Concrete		Asphalt	No odor No visual	
			3	Fill		Brown sandy clayey silt FILL with cinders and red brick Slightly moist, Loose		
14.1	100%		6					
11.1	75%		9	CL		Black silty CLAY Slightly moist, Stiff		
			12			Grades to tan and gray silty CLAY at 8.5' Slightly moist to moist, Stiff		
9.0	95%		15			Boring terminated at 12 feet		
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: SIMCO EarthProbe 200 Driller: K. Conlon Geologist: S. Strothoff LUST Incident No: -		
Water Depth While Drilling: ND Water Depth After Drilling: NA				Project Number: 02448B		Page 1		




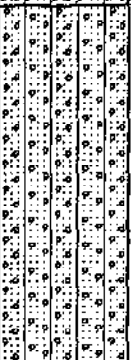


 PIONEER Engineering & Environmental Services, Inc.				Boring Log			Boring No.: B-21
				Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois			Date Begin: 9/12/02 Date End: 9/12/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
				Concrete		Asphalt	No odor No visual
3.8	50%			Fill		Brown and black sandy clayey silt FILL with gravel, cinders, slag and foundry sand Slightly moist, Loose	
			3				
3.7	75%			Fill			
			6				
101.5	90%			Fill		Coarse gravel and sand FILL with cinders and slag Moist, Loose	
			9				
22.9	95%			CL		Tan and gray silty CLAY Slightly moist, Stiff	
			12			Boring terminated at 12 feet	
			15				

Completion Notes: Hatched pattern indicates sample analyzed.		Drill Rig:	SIMCO EarthProbe 200
		Driller:	K. Conlon
		Geologist:	S. Strothoff
		LUST Incident No:	-
Water Depth While Drilling: 9' Water Depth After Drilling: NA		Project Number: 02448B	Page 1

			<h2 style="text-align: center;">Boring Log</h2>				Boring No.: B-22	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 9/12/02 Date End: 9/12/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
5.5	75%			Concrete		Asphalt	No odor No visual	
				Fill		Brown and black sandy silt FILL with gravel, cinders and brick Slightly moist, Loose		
11.5	90%		3					
			6					
6.5	10%			CL		Black silty CLAY Slightly moist, Stiff		
			9					
4.2	100%			ML		Tan and gray clayey SILT Moist to slightly moist		
			12					
						Boring terminated at 12 feet		
			15					




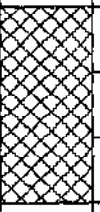

Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig:	SIMCO EarthProbe 200
	Driller:	K. Conlon
	Geologist:	S. Strothoff
	LUST Incident No:	-

Water Depth While Drilling: ND	Water Depth After Drilling: NA	Project Number: 02448B	Page 1
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				Boring Log			Boring No.: B-23
				Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois			Date Begin: 10/15/02
							Date End: 10/15/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
0.0	75%			Asphalt		Asphalt	No odor No visual
				Fill		Tan sandy silty clay FILL with gravel and trace cinders Slightly moist, Loose	
			3				
0.1	100%			SM		Tan medium-grained silty SAND Slightly moist, Loose	
			6				
2.9	75%						
			9	Fill		Brown silty clay FILL with gravel and glass Slightly moist to moist, Loose	
1.0	90%						
			12			Boring terminated at 12 feet	
			15				


Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig:	SIMCO EarthProbe 200
	Driller:	P. Vrhovac
	Geologist:	S. Strothoff
	LUST Incident No:	-





Water Depth While Drilling: 10.5'	Water Depth After Drilling: NA	Project Number: 02448B	Page 1
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			Boring Log				Boring No.: B-24	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 10/15/02 Date End: 10/15/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
7.1	75%			Asphalt		Asphalt	No odor No visual	
			3	Fill		Brown and black sandy silt FILL with gravel, cinders and brick Slightly moist, Loose		
18.2	90%		6					
217.9	95%		9					
3.3	90%			ML		Black clayey sandy SILT Slightly moist, Loose		
			12			Boring terminated at 12 feet		
			15					

Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig:	SIMCO EarthProbe 200
	Driller:	P. Vrhovac
	Geologist:	S. Strothoff
	LUST Incident No:	-

Water Depth While Drilling: 10'	Water Depth After Drilling: NA	Project Number: 02448B	Page 1
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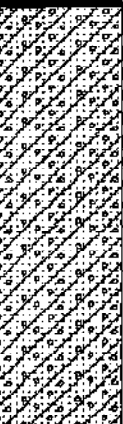

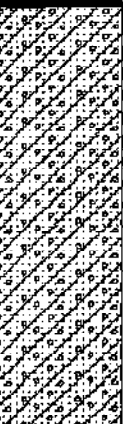


			Boring Log				Boring No.: B-25	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 10/15/02 Date End: 10/15/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
2.0	<10%			Asphalt		Asphalt	No odor No visual	
						Tan sandy silty clay FILL with brick Slightly moist, Loose		
			3	Fill				
125.6	100%		6			Boring terminated at 6 feet due to collapsed hole		
			9					
			12					
			15					
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: Bosch Sampler		
						Driller: P. Vrhovac		
						Geologist: S. Strothoff		
						LUST Incident No: -		
Water Depth While Drilling: ND				Water Depth After Drilling: NA		Project Number: 02448B		Page 1

			Boring Log				Boring No.: B-26
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 10/15/02
							Date End: 10/15/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
1.4	<10%		<div>3</div> <div>6</div> <div>9</div> <div>12</div> <div>15</div>	Asphalt		Asphalt	No odor No visual
				Fill		Brown and black sandy silt FILL with trace brick Slightly moist, Loose	
						Boring terminated at 3 feet due to collapsed	
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: Bosch Sampler	
						Driller: P. Vrhovac	
						Geologist: S. Strothoff	
						LUST Incident No: -	
Water Depth While Drilling: ND				Water Depth After Drilling: NA		Project Number: 02448B	Page 1

			Boring Log				Boring No.: B-27
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 10/15/02
							Date End: 10/15/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
0.1	25%			Asphalt		Asphalt	No odor No visual
						Brown and black sandy silt FILL with trace brick Slightly moist, Loose	
53.7	90%		3	Fill			
			6			Boring terminated at 6 feet due to auger refusal	
			9				
			12				
			15				






Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig:	Bosch Sampler
	Driller:	P. Vrhovac
	Geologist:	S. Strothoff
	LUST Incident No:	-


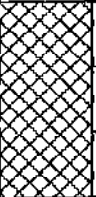
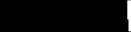
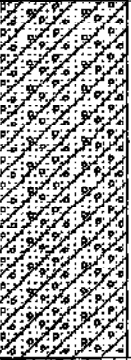
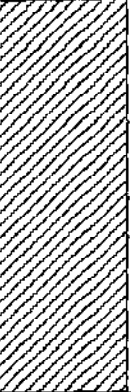
Water Depth While Drilling: ND	Water Depth After Drilling: NA	Project Number: 02448B	Page 1
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			Boring Log				Boring No.: B-28
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 10/15/02
							Date End: 10/15/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
7.8	75%			Asphalt		Asphalt	No odor No visual
						Brown and black sandy silt FILL with gravel, cinders, glass and brick Slightly moist, Loose	
101.7	100%		3	Fill			
			6				
0.0	100%			CL		Dark brown silty CLAY grading to tan and gray silty CLAY Slightly moist, Stiff	
			9	ML		Brown clayey SILT Slightly moist, Loose	
0.0	100%						
			12			Boring terminated at 12 feet	
			15				




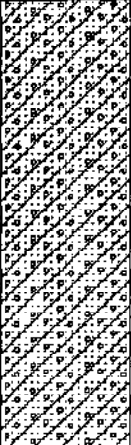


Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig:	SIMCO EarthProbe 200
	Driller:	P. Vrhovac
	Geologist:	S. Strothoff
	LUST Incident No:	-

Water Depth While Drilling: ND	Water Depth After Drilling: NA	Project Number: 02448B	Page 1
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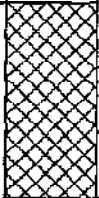

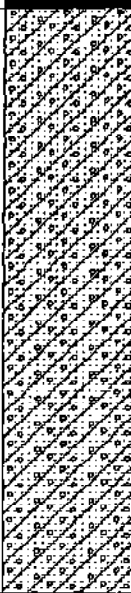


			Boring Log				Boring No.: B-29	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 10/15/02 Date End: 10/15/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
				Asphalt		Asphalt	No odor No visual	
11.1	75%			Fill		Brown and black sandy silt FILL with gravel, cinders, glass and brick Slightly moist, Loose		
			3					
17.4	90%			CL		Brown silty CLAY grading to tan and gray silty CLAY Slightly moist, Stiff		
			6					
0.0	100%					Boring terminated at 9 feet		
			12					
			15					
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: SIMCO EarthProbe 200		
						Driller: P. Vrhovac		
						Geologist: S. Strothoff		
						LUST Incident No: -		
Water Depth While Drilling: ND				Water Depth After Drilling: NA		Project Number: 02448B		Page 1

 PIONEER Engineering & Environmental Services, Inc.			Boring Log				Boring No.: B-30	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 10/15/02 Date End: 10/15/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
7.5	75%		3	Asphalt		Asphalt	No odor No visual	
				Fill		Brown and black sandy silt FILL with gravel, cinders, glass and brick Slightly moist, Loose		
0.0	100%		6		CL			
2.1	95%		9					
0.0	90%		12					
			15			Boring terminated at 12 feet		

Completion Notes: Hatched pattern indicates sample analyzed.	Drill Rig:	SIMCO EarthProbe 200	
	Driller:	P. Vrhovac	
	Geologist:	S. Strothoff	
	LUST Incident No:	-	
Water Depth While Drilling: ND	Water Depth After Drilling: NA	Project Number: 02448B	Page 1

			Boring Log				Boring No.: B-31
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 10/15/02
							Date End: 10/15/02
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes
136.7	75%		3	Asphalt		Asphalt	No odor No visual
111.4	95%		6	Fill		Brown and black sandy silt FILL with gravel, cinders, glass and brick Slightly moist, Loose	
0.0	100%		9	CL		Brown silty CLAY Slightly moist, Stiff	
0.0	100%		12	ML		Tan clayey SILT Slightly moist, Loose	
			15			Boring terminated at 12 feet	

Completion Notes: Hatched pattern indicates sample analyzed.		Drill Rig:	SIMCO EarthProbe 200
		Driller:	P. Vrhovac
		Geologist:	S. Strothoff
		LUST Incident No:	-
Water Depth While Drilling: ND Water Depth After Drilling: NA		Project Number: 02448B	Page 1

			<h3>Boring Log</h3>				Boring No.: B-32	
			Site: MRC Polymers, Inc. 3307 South Lawndale Avenue Chicago, Illinois				Date Begin: 10/15/02 Date End: 10/15/02	
FID (ppm)	Sample Recovery	Sample	Depth Feet	Soil Class	Lithology	Description	Notes	
6.9	90%		3	Asphalt		Asphalt	No odor No visual	
0.0	95%		6	Fill		Brown and black sandy silt FILL with gravel, cinders, glass and brick Slightly moist to moist, Loose		
0.0	90%		9					
0.0	100%		12	CL		Brown silty CLAY Slightly moist, Stiff		
				ML		Tan clayey SILT Slightly moist, Loose		
			15			Boring terminated at 12 feet		
Completion Notes: Hatched pattern indicates sample analyzed.						Drill Rig: SIMCO EarthProbe 200		
						Driller: P. Vrhovac		
						Geologist: S. Strothoff		
						LUST Incident No: -		
Water Depth While Drilling: ND				Water Depth After Drilling: NA		Project Number: 02448B		Page 1

APPENDIX D
PHOTOGRAPHIC LOG



Probing to locate naphtha UST



Soil testing at B-12

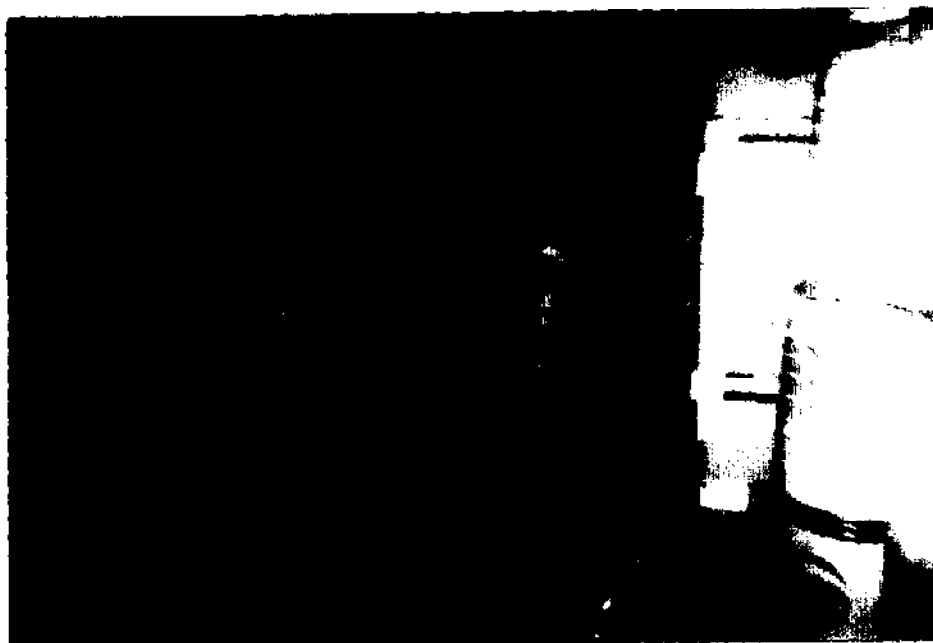
PIONEER Engineering &
Environmental
Services, Inc.

MRC Polymers, Inc.
3307 S. Lawndale Ave.
Chicago, Illinois

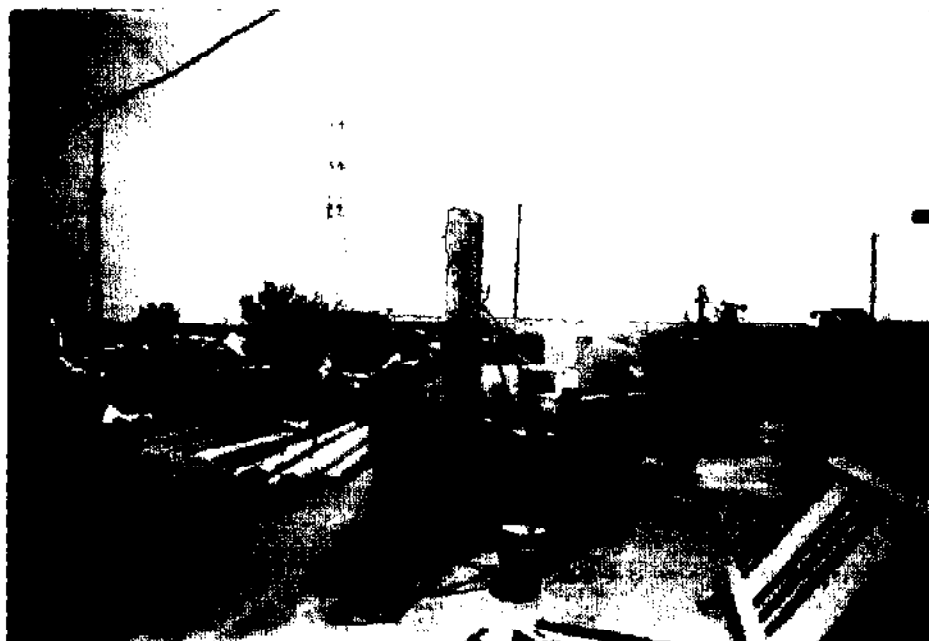
PHOTOGRAPHIC LOG

Project Number: 02448B

Feb. 2004



Soil testing at B-15



Soil testing at B-30

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Chicago, Illinois

PHOTOGRAPHIC LOG

Project Number: 02448B

Feb. 2004



Soil Testing at B-29



Cleaning of 10,000-gallon heating oil UST

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Chicago, Illinois

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Project Number: 02448B

Feb. 2004



Removal of 2,000-gallon naphtha UST



View of naphtha UST excavation showing conditions of release

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Chicago, Illinois

PHOTOGRAPHIC LOG

Project Number: 02448B

Feb. 2004



Recovery of residual liquids from naphtha UST excavation



Excavation of concrete-encased 250-gallon gasoline UST

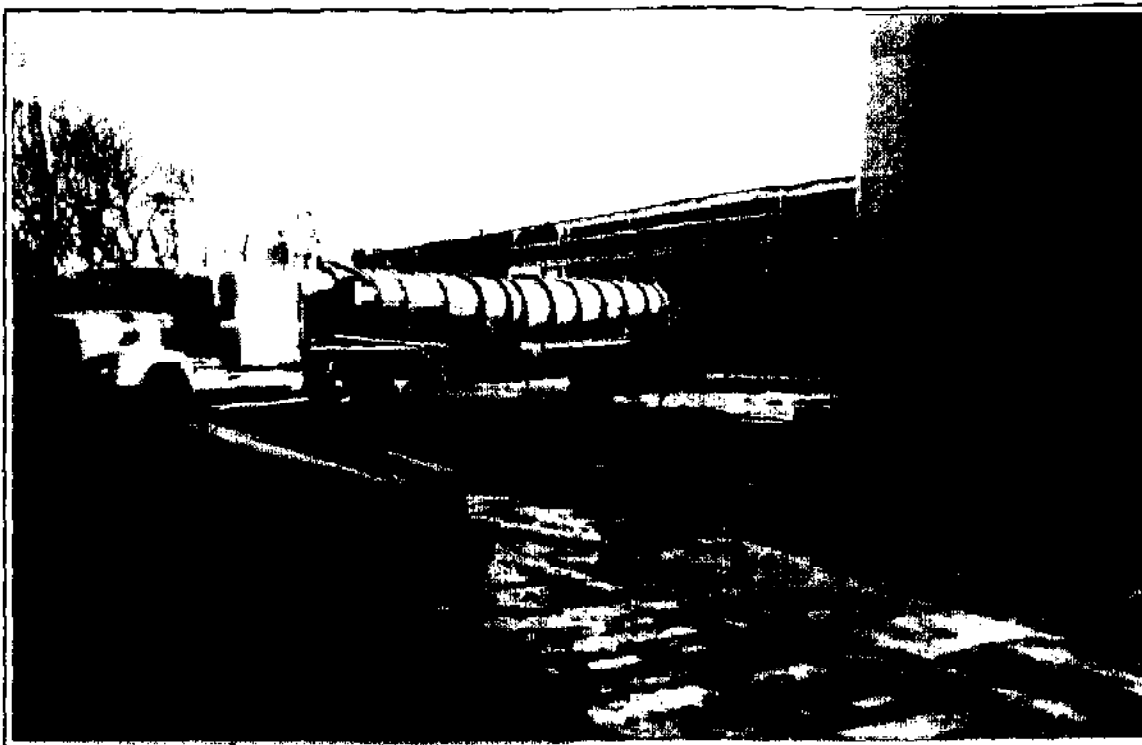
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Chicago, Illinois

PHOTOGRAPHIC LOG

Project Number: 02448B

Feb. 2004



Recovery of liquid UST contents from 15,000-gallon methanol UST



Exposed 15,000-gallon methanol UST

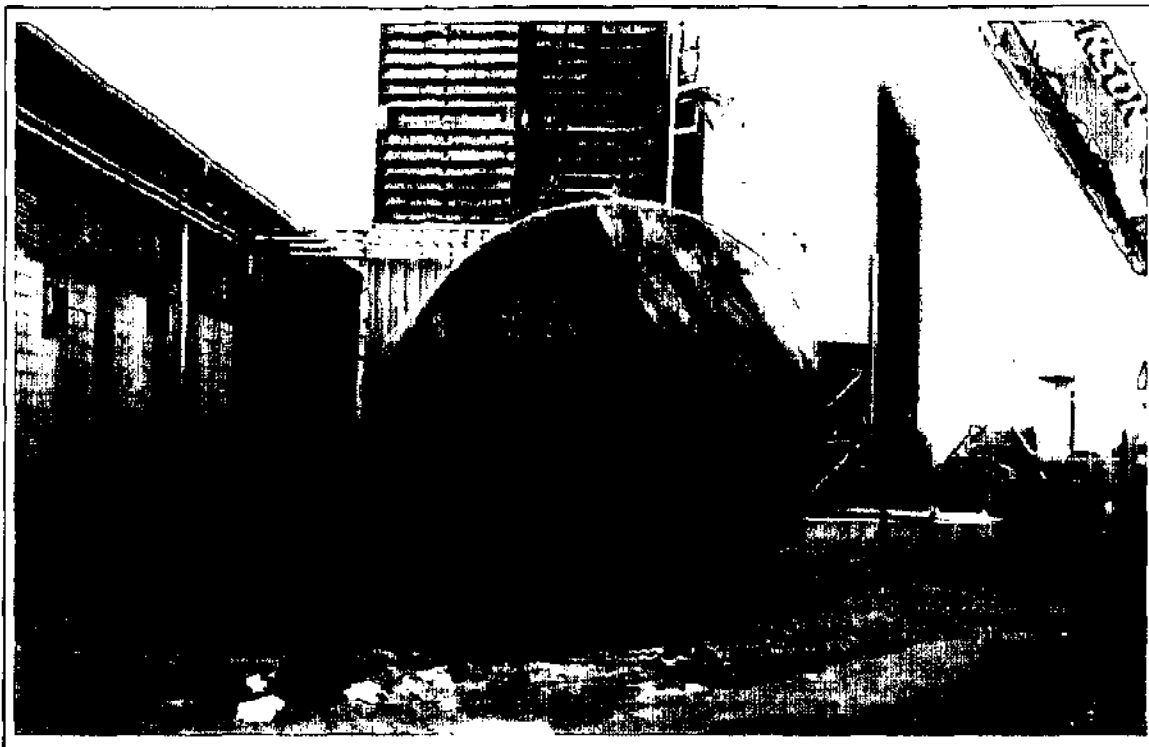
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Chicago, Illinois

PHOTOGRAPHIC LOG

Project Number: 02448B

Feb. 2004



Removal of 15,000-gallon methanol UST



Removal of 15,000-gallon methanol UST

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3307 S. Lawndale Ave.
Chicago, Illinois

PHOTOGRAPHIC LOG

Project Number: 02448B

Feb. 2004



Cleaning of 15,000-gallon methanol UST



Filling 10,000-gallon heating oil UST with slurry

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MRC Polymers, Inc.
3307 S. Lawndale Ave.
Chicago, Illinois

PHOTOGRAPHIC LOG

Project Number: 02448B

Feb. 2004

APPENDIX E
WASTE DISPOSAL & UST DOCUMENTATION

OMB# 2050-0175 Expires 12/31/2003

MAIL THE COMPLETED FORM TO: The Appropriate State or EPA Regional Office.	United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM		
1. Reason for Submittal (See instructions on page 23) MARK CORRECT BOX(ES)	Reason for Submittal: <input checked="" type="checkbox"/> To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities). <input type="checkbox"/> To provide Subsequent Notification of Regulated Waste Activity (to update site identification information). <input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application. <input type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____). <input type="checkbox"/> As a component of the Hazardous Waste Report.		
2. Site EPA ID Number (See instructions on page 24)	EPA ID Number: _ _ _ _ _		
3. Site Name (See instructions on page 24)	Name: <u>MRC Polymers, Inc.</u>		
4. Site Location Information (See instructions on page 24)	Street Address: <u>3307 S. Lawndale Avenue</u>		
	City, Town, or Village: <u>Chicago</u>	State: <u>IL</u>	
	County Name: <u>COOK</u>	Zip Code: <u>60632</u>	
5. Site Land Type (See instructions on page 24)	Site Land Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
6. North American Industry Classification System (NAICS) Code(s) for the Site (See instructions on page 24)	A. <u>325211</u>	B.	
	C.	D.	
7. Site Mailing Address (See instructions on page 25)	Street or P. O. Box: <u>same</u>		
	City, Town, or Village:		
	State:		
	Country:	Zip Code:	
8. Site Contact Person (See instructions on page 25)	First Name: <u>Steve</u>	MI:	Last Name: <u>Sola</u>
	Phone Number: <u>(773) 890-5505</u>		Phone Number Extension:
9. Legal Owner and Operator of the Site (See instructions on pages 25 to 26)	A. Name of Site's Legal Owner: <u>DANIEL Eberhardt</u>		Date Became Owner (mm/dd/yyyy): <u>12/31/1998</u>
	Owner Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
	B. Name of Site's Operator: <u>MRC Polymers, Inc.</u>		Date Became Operator (mm/dd/yyyy): <u>12/15/01</u>
	Operator Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		

EPA ID No.

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site. See instructions on pages 28 to 30)

A. Hazardous Waste Activities

- 1. Generator of Hazardous Waste**
(Choose only one of the following three categories.)

- ☒ a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo.) of non-acute hazardous waste; or
- ☐ b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs./mo.) of non-acute hazardous waste; or
- ☐ c. CESQG: Less than 100 kg/mo (220 lbs./mo.) of non-acute hazardous waste

In addition, indicate other generator activities. (Mark all that apply)

- ☐
- d. United States Importer of Hazardous Waste
-
- ☐
- e. Mixed Waste (hazardous and radioactive) Generator

For Items 2 through 6, mark all that apply.

- ☐ 2. **Transporter of Hazardous Waste**
- ☐ 3. **Treater, Storer, or Disposer of Hazardous Waste (at your site)** **Note:** A hazardous waste permit is required for this activity.
- ☐ 4. **Recycler of Hazardous Waste (at your site)** **Note:** A hazardous waste permit may be required for this activity.
- ☐ 5. **Exempt Boiler and/or Industrial Furnace**
 - ☐ a. **Small Quantity On-site Burner Exemption**
 - ☐ b. **Smelting, Melting, and Refining Furnace Exemption**
- ☐ 6. **Underground Injection Control**

B. Universal Waste Activities

- 1. Large Quantity Handler of Universal Waste (accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated].** Indicate types of universal waste generated and/or accumulated at your site. (Mark all boxes that apply):

Generate	Accumulate
<p>1. $z_1 = 0$</p> <p>2. $z_2 = 0$</p> <p>3. $z_3 = 0$</p> <p>4. $z_4 = 0$</p> <p>5. $z_5 = 0$</p> <p>6. $z_6 = 0$</p> <p>7. $z_7 = 0$</p> <p>8. $z_8 = 0$</p> <p>9. $z_9 = 0$</p> <p>10. $z_{10} = 0$</p> <p>11. $z_{11} = 0$</p> <p>12. $z_{12} = 0$</p> <p>13. $z_{13} = 0$</p> <p>14. $z_{14} = 0$</p> <p>15. $z_{15} = 0$</p> <p>16. $z_{16} = 0$</p> <p>17. $z_{17} = 0$</p> <p>18. $z_{18} = 0$</p> <p>19. $z_{19} = 0$</p> <p>20. $z_{20} = 0$</p> <p>21. $z_{21} = 0$</p> <p>22. $z_{22} = 0$</p> <p>23. $z_{23} = 0$</p> <p>24. $z_{24} = 0$</p> <p>25. $z_{25} = 0$</p> <p>26. $z_{26} = 0$</p> <p>27. $z_{27} = 0$</p> <p>28. $z_{28} = 0$</p> <p>29. $z_{29} = 0$</p> <p>30. $z_{30} = 0$</p> <p>31. $z_{31} = 0$</p> <p>32. $z_{32} = 0$</p> <p>33. $z_{33} = 0$</p> <p>34. $z_{34} = 0$</p> <p>35. $z_{35} = 0$</p> <p>36. $z_{36} = 0$</p> <p>37. $z_{37} = 0$</p> <p>38. $z_{38} = 0$</p> <p>39. $z_{39} = 0$</p> <p>40. $z_{40} = 0$</p> <p>41. $z_{41} = 0$</p> <p>42. $z_{42} = 0$</p> <p>43. $z_{43} = 0$</p> <p>44. $z_{44} = 0$</p> <p>45. $z_{45} = 0$</p> <p>46. $z_{46} = 0$</p> <p>47. $z_{47} = 0$</p> <p>48. $z_{48} = 0$</p> <p>49. $z_{49} = 0$</p> <p>50. $z_{50} = 0$</p> <p>51. $z_{51} = 0$</p> <p>52. $z_{52} = 0$</p> <p>53. $z_{53} = 0$</p> <p>54. $z_{54} = 0$</p> <p>55. $z_{55} = 0$</p> <p>56. $z_{56} = 0$</p> <p>57. $z_{57} = 0$</p> <p>58. $z_{58} = 0$</p> <p>59. $z_{59} = 0$</p> <p>60. $z_{60} = 0$</p> <p>61. $z_{61} = 0$</p> <p>62. $z_{62} = 0$</p> <p>63. $z_{63} = 0$</p> <p>64. $z_{64} = 0$</p> <p>65. $z_{65} = 0$</p> <p>66. $z_{66} = 0$</p> <p>67. $z_{67} = 0$</p> <p>68. $z_{68} = 0$</p> <p>69. $z_{69} = 0$</p> <p>70. $z_{70} = 0$</p> <p>71. $z_{71} = 0$</p> <p>72. $z_{72} = 0$</p> <p>73. $z_{73} = 0$</p> <p>74. $z_{74} = 0$</p> <p>75. $z_{75} = 0$</p> <p>76. $z_{76} = 0$</p> <p>77. $z_{77} = 0$</p> <p>78. $z_{78} = 0$</p> <p>79. $z_{79} = 0$</p> <p>80. $z_{80} = 0$</p> <p>81. $z_{81} = 0$</p> <p>82. $z_{82} = 0$</p> <p>83. $z_{83} = 0$</p> <p>84. $z_{84} = 0$</p> <p>85. $z_{85} = 0$</p> <p>86. $z_{86} = 0$</p> <p>87. $z_{87} = 0$</p> <p>88. $z_{88} = 0$</p> <p>89. $z_{89} = 0$</p> <p>90. $z_{90} = 0$</p> <p>91. $z_{91} = 0$</p> <p>92. $z_{92} = 0$</p> <p>93. $z_{93} = 0$</p> <p>94. $z_{94} = 0$</p> <p>95. $z_{95} = 0$</p> <p>96. $z_{96} = 0$</p> <p>97. $z_{97} = 0$</p> <p>98. $z_{98} = 0$</p> <p>99. $z_{99} = 0$</p> <p>100. $z_{100} = 0$</p>	<p>1. $z_1 = 0$</p> <p>2. $z_2 = 0$</p> <p>3. $z_3 = 0$</p> <p>4. $z_4 = 0$</p> <p>5. $z_5 = 0$</p> <p>6. $z_6 = 0$</p> <p>7. $z_7 = 0$</p> <p>8. $z_8 = 0$</p> <p>9. $z_9 = 0$</p> <p>10. $z_{10} = 0$</p> <p>11. $z_{11} = 0$</p> <p>12. $z_{12} = 0$</p> <p>13. $z_{13} = 0$</p> <p>14. $z_{14} = 0$</p> <p>15. $z_{15} = 0$</p> <p>16. $z_{16} = 0$</p> <p>17. $z_{17} = 0$</p> <p>18. $z_{18} = 0$</p> <p>19. $z_{19} = 0$</p> <p>20. $z_{20} = 0$</p> <p>21. $z_{21} = 0$</p> <p>22. $z_{22} = 0$</p> <p>23. $z_{23} = 0$</p> <p>24. $z_{24} = 0$</p> <p>25. $z_{25} = 0$</p> <p>26. $z_{26} = 0$</p> <p>27. $z_{27} = 0$</p> <p>28. $z_{28} = 0$</p> <p>29. $z_{29} = 0$</p> <p>30. $z_{30} = 0$</p> <p>31. $z_{31} = 0$</p> <p>32. $z_{32} = 0$</p> <p>33. $z_{33} = 0$</p> <p>34. $z_{34} = 0$</p> <p>35. $z_{35} = 0$</p> <p>36. $z_{36} = 0$</p> <p>37. $z_{37} = 0$</p> <p>38. $z_{38} = 0$</p> <p>39. $z_{39} = 0$</p> <p>40. $z_{40} = 0$</p> <p>41. $z_{41} = 0$</p> <p>42. $z_{42} = 0$</p> <p>43. $z_{43} = 0$</p> <p>44. $z_{44} = 0$</p> <p>45. $z_{45} = 0$</p> <p>46. $z_{46} = 0$</p> <p>47. $z_{47} = 0$</p> <p>48. $z_{48} = 0$</p> <p>49. $z_{49} = 0$</p> <p>50. $z_{50} = 0$</p> <p>51. $z_{51} = 0$</p> <p>52. $z_{52} = 0$</p> <p>53. $z_{53} = 0$</p> <p>54. $z_{54} = 0$</p> <p>55. $z_{55} = 0$</p> <p>56. $z_{56} = 0$</p> <p>57. $z_{57} = 0$</p> <p>58. $z_{58} = 0$</p> <p>59. $z_{59} = 0$</p> <p>60. $z_{60} = 0$</p> <p>61. $z_{61} = 0$</p> <p>62. $z_{62} = 0$</p> <p>63. $z_{63} = 0$</p> <p>64. $z_{64} = 0$</p> <p>65. $z_{65} = 0$</p> <p>66. $z_{66} = 0$</p> <p>67. $z_{67} = 0$</p> <p>68. $z_{68} = 0$</p> <p>69. $z_{69} = 0$</p> <p>70. $z_{70} = 0$</p> <p>71. $z_{71} = 0$</p> <p>72. $z_{72} = 0$</p> <p>73. $z_{73} = 0$</p> <p>74. $z_{74} = 0$</p> <p>75. $z_{75} = 0$</p> <p>76. $z_{76} = 0$</p> <p>77. $z_{77} = 0$</p> <p>78. $z_{78} = 0$</p> <p>79. $z_{79} = 0$</p> <p>80. $z_{80} = 0$</p> <p>81. $z_{81} = 0$</p> <p>82. $z_{82} = 0$</p> <p>83. $z_{83} = 0$</p> <p>84. $z_{84} = 0$</p> <p>85. $z_{85} = 0$</p> <p>86. $z_{86} = 0$</p> <p>87</p>

- a. Batteries ☐ ☐
- b. Pesticides ☐ ☐
- c. Thermostats ☐ ☐
- d. Lamps ☐ ☐
- e. Other (specify) _____ ☐ ☐
- f. Other (specify) _____ ☐ ☐
- g. Other (specify) _____ ☐ ☐

- ☐ **2. Destination Facility for Universal Waste**
Note: A hazardous waste permit may be required for this activity.

C. Used DB Activities (Mark all boxes that apply.)

- 1. Used Oil Transporter - Indicate Type(s) of Activity(ies).**

- ☐ a. Transporter
- ☐ b. Transfer Facility

2. Used Oil Processor and/or Re-refiner - Indicate Type(s) of Activity(ies)

- ☐ a. Processor
- ☐ b. Re-refiner

- ☐ 3. Off-Specification Used Oil Burner

- 4. Used Oil Fuel Marketer - Indicate Type(s) of Activity(ies)**

- ☐ a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- ☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

11. Description of Hazardous Wastes (See instructions on page 31)

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

[illegible]

OMB# 2050-0175 Expires 12/31/2003

EPA ID No.

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed for waste codes.

12. Comments (See instructions on page 31)

MRC Polymers, Inc. is in the process of scheduling the removal of several underground storage tanks (USTs) that were identified during a Phase I Environmental Site Assessment including one 15,000-gallon methanol UST. Investigation work indicates that approximately 7,500 gallons of methanol are present in the UST. Prior to UST removal, the methanol will be removed from the tank by a licensed hauler for off-site disposal or recycling. METHANOL IS NOT GENERATED or USED in conjunction with MRC's operations.

13. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (See instructions on page 31)

Signature of owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
<i>Steven V. Sola</i>	Steven V. Sola - Corporate Secretary	07/31/2003

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY INVENTORY IDENTIFICATION NUMBER APPLICATION

FOR AGENCY USE ONLY

INVENTORY # ISSUED:	TRAN CODE	TRAN DATE	INITIALS
_____	A	____/____/____	XXX
1 _____ 10	14	15 _____ 20	21 23

Please read the instructions on Page 2 before completing. Please exclude punctuations when completing. Limit information to the amount of blanks provided or we will have to abbreviate for you. The information given is exactly how it will appear in the Bureau of Land's computer inventory system.

IEMA INCIDENT # (if applicable) _____

LOCATION ADDRESS

(exact street location where waste is generated)

Card Type

COMPANY NAME:

010

MRC Polymers Inc.

11 13

24

53

NAICS CODE(s):

94

99

100

105

Generator Status: (check all that apply)

Hazardous LQG ☒

Hazardous SQG or CESQG _____

Nonhazardous Generator _____

LOCATION (Post Office Box numbers will not be accepted):

020

3307 S. Lawndale Avenue

11 13

24

48

CITY: Chicago

STATE: IL

ZIP: 60632

COUNTY: COOK

TELEPHONE: 7738909000

CONTACT: Steven Sala

MAILING ADDRESS

(if same as above, leave blank)

030

STREET:

11 13

54

78

PO BOX:

79

84

CITY:

85

104

STATE:

105 106

ZIP:

107

115

RETURN ADDRESS:

INDICATE THE LOCATION TO WHICH THIS FORM SHOULD BE RETURNED.

E-mail Address: _____

Company Name: _____

Contact Person: _____

Street: _____

City: _____

State: _____

Zip: _____

AUTHORIZATION STATEMENT

I authorize this request for assignment of an Illinois inventory ID number. This company has not previously shipped waste from this location under the Illinois Manifest System. If my waste is a RCRA hazardous waste, I certify this company has or has applied for a USEPA ID number.

Signature of Authorized Representative: _____

Stephanie R. Grotzsch
Pioneer Eng & Env. Svcs, Inc.
for MRC Polymers, Inc.

Date: _____

7/24/03



**CITY OF CHICAGO
DEPARTMENT OF ENVIRONMENT
UNDERGROUND STORAGE TANK UNIT
30 N. LASALLE STREET, 25TH FLOOR
CHICAGO, ILLINOIS 60602**

PERMIT #: _____

Application for Permit to REMOVE Underground Storage Tanks for Petroleum and Hazardous Tanks. To be completed in triplicate.

1) OWNER OF TANK(S):

MRC Polymers, Inc.
Name

2) FACILITY NAME:

MRC Polymers, Inc.
Name

3307 S. Lawndale Avenue
Street Address

3307 S. Lawndale Avenue
Street Address

Chicago IL 60623
City State Zip

Chicago IL 60623
City State Zip

(773) 890-5505 / Steven Sola
Phone CFO Contact Person:

(773) 890-5505 / Steven Sola
Phone CFO Contact Person:

Facility I.D. #

plastics recycling/manuf.

Use of Premises

You must notify IEMA 1-800-782-7860 within 24 hours of leaks or contaminated soil. Removal must be in accordance with acceptable closure requirements and procedure such as API Bulletin 1604. A site assessment must be conducted to determine if a release has occurred.

3) Removal of Tanks:

a) Number and size of tanks being removed

(1) 15,000-gal methanol
(4) 2,000-gal naphtha
(1) 260-gal gasoline

b) Total number of all tanks removed: 3

c) Reason for removal of tanks: No longer in use

d) If tank is leaking, give IEMA incident number: NA

e) What products were stored in each tank? methanol; naphtha; gasoline

f) If tanks contain products other than petroleum products, please indicate here: NA

g) Date each tank was last used? Dec. 1973

h) A written notice of removal shall be given to the City of Chicago, Department of Environment at least 30 days prior to the removal, giving

location, number and size of tanks. This application will constitute that 30 day written notice. The 30 day period commences with this application completed and the fee received in our office.

4) Insufficient information supplied for permit review or omission of permit fee is grounds for application rejection. No work is to commence without a granted permit in hand and must be available upon request of inspectors. All work must be done by contractors registered with the State Fire Marshall's Office and by the City of Chicago, Department of Environment.

5) A permit fee of \$100 for each facility must accompany this application. Checks or money orders (**FROM THE CONTRACTOR**) are to be made payable to the City of Chicago, Department of Environment, do not send cash.

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that all submitted information is true, accurate and complete.

Name of contractor: Pioneer Engineering & Environmental Services, Inc. Registration #: IL-366

Address: 700 N. Sacramento Blvd., Ste. 101

City: Chicago State: IL Zip: 60612

Name and Title: Stephanie L. Strothoff Phone: (312) 587-1021

Signature: Stephanie L. Strothoff Date: 6/11/03

The Office of the State Fire Marshall and the City of Chicago, Department of Environment are requesting information that is necessary to accomplish the statutory purpose as outlined in the "425ILCS 25/9." Disclosure of this information is REQUIRED. Failure to provide any information will result in this form not being processed.



**CITY OF CHICAGO
DEPARTMENT OF ENVIRONMENT
UNDERGROUND STORAGE TANK UNIT
30 N. LA SALLE STREET, 25th FLOOR
CHICAGO, ILLINOIS 60602**

PERMIT # _____

REVIEWED BY: _____

Application for Permit for ABANDONMENT IN PLACE of Underground Storage Tanks.

1) OWNER OF TANKS: Corporation, Partnership or other business entity (Must be mailing address).

2) FACILITY: Name and Address where tanks are located.

MRC Polymers, Inc.
Name
3307 S. Lawndale Avenue
Street Address
Chicago IL 60623
City State Zip
Steven Sola/CFO (773) 890-5505
Contact Person Phone

MRC Polymers, Inc.
Name
3307 S. Lawndale Avenue
Street Address
Chicago IL 60623
City State Zip
Steven Sola/CFO (773) 890-5505
Contact Person Phone

Use of premises: plastics recycling /
manufacturing

Facility #: _____

3) GENERAL INFORMATION: Check whichever applies and fill in the appropriate blanks for the UST system(s) to be abandoned in place. Attached additional sheet(s) if more space is needed.

a) TANK(S):

Number of Tank	Capacity (In gallons)	Product stored	Steel	FRP	Composite	Other	Date last used
1	10,000	heating oil	Y				12/73

Use this space for explanation for above:

b) EXPLANATION OF WHY WAIVER IS REQUESTED: Describe where the tank(s) are located and give the reasons why abandonment in place is necessary such as loss of support to structures, streets, railroad tracks, other tanks or where it demonstrated that a removal is infeasible. Attach additional sheet(s) if more space is needed.

UST is under sewer line & overhead electric lines; UST is
between building & aboveground storage containers that
are mounted in-place on a 3' high concrete pad

4) **SITE PLANS:** Drawings of the site must accompany the application forms. They must show the UST(s) to be abandoned in place in relation to any structures, streets, railroad tracks, other tanks or other pertinent site characteristics. Dimensions must be given from the UST to any object of concern. All objects must be named. The maximum plan size must be 11" X 17". Blueprints are not acceptable. *(see attached)*

5) **A CERTIFICATION OF SITE CONDITION** must be submitted on the form prescribed by the City of Chicago, Department of Environment and attached to this application.

6) **MISCELLANEOUS:**

A) **FILL MATERIAL:** Concrete

Ballast calculations must be submitted when using inert foam.

B) **AUXILIARY INFORMATION:** Other supplemental information, detail drawings or supporting documents may be necessary depending on the site characteristics and the reason for abandonment in place.

C) **APPLICATION REJECTION:** Insufficient information or illegibility can be cause for return or denial.

D) **PERMIT TO WORK:** No work can proceed without a permit in hand and must be available upon request of the CDOE Inspector.

7) **APPLICANT:** The **RESPONSIBLE CONTRACTOR** must complete this section (or owner if doing own work). A fee of \$100.00 for each site must accompany this application. Checks or money orders are to be made payable to the City of Chicago, Department of Environment. Do not send cash.

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that all information submitted is true, accurate and complete.

Company Name: Pioneer Engineering & Environmental Services, Inc.

Address: 700 N. Sacramento Blvd., Ste. 101 Chicago, IL 60612

Telephone No. (312) 587-1021 Contractor's Registration #: 14-366

Name of Authorized Representative: Stephanie L. Strothoff

Title: Project Manager

Signature: Stephanie L. Strothoff Date: 6/13/03

The City of Chicago, Department of Environment is requesting information that is necessary to accomplish the statutory purpose as outlined in 425 ILCS 25/9. Disclosure of this information is required. Failure to provide any information will result in this form not being processed.

JUN 30 03 20:00 FROM MRC POLYMERS

ID: 77327C4431

PAGE 1/2



MRC

Business Solutions through Compounding
QS 9000/A2LA REGISTERED

MRC Polymers, Inc.

3307 South Lawndale Avenue
Chicago, Illinois 60623
773-890-9000 FAX 773-890-9007

June 10, 2003

Office of the Illinois State Fire Marshall
Division of Petroleum and Chemical Safety
1035 Stevenson Drive
Springfield, IL 62703-4259

re: 3307 S. Lawndale
Chicago, IL 60623

To Whom It May Concern:

This is to certify, as owner of the above captioned site (subject property) that the UST's located at the subject property have not been in use at any time after January 1, 1974.

Sincerely,

Daniel Eberhardt
President



MRC

Business Solutions through Compounding
QS 9000/A2LA F REGISTERED

MRC Polymers, Inc.

3307 South Lawndale Avenue

Chicago, Illinois 60623

773-890-9000 FAX 773-890-8007

June 12, 2003

City of Chicago
Department of Environment
Underground Storage Tank Unit
30 N. LaSalle Street, 25th Floor
Chicago, Illinois 60602

RE: MRC Polymers, Inc.
3307 South Lawndale Avenue
Chicago, Illinois 60623

To Whom It May Concern:

This is to certify, as owner of the above-captioned site (subject property), that the USTs located at the subject property have not been in use at any time after January 1, 1974.

Sincerely

Daniel Eberhardt
Property Owner



**CITY OF CHICAGO
DEPARTMENT OF ENVIRONMENT
UNDERGROUND STORAGE TANK UNIT
30 N. LASALLE STREET, 25TH FLOOR
CHICAGO, ILLINOIS 60602**

CERTIFICATION OF SITE CONDITION-CLEAN SITE

I certify that the UST(s) to be abandoned in place is not currently leaking nor has leaked in the past. The owner/operator has measured for the presence of a release where contamination is most likely to be present at each UST site in accordance with 41 Ill. Adm. Code 170.640. The necessity to meet Illinois clean-up objectives are contained in 41 Ill. Adm. Code 170.600, 610 and are incorporated into the certification through 41 Ill. Adm. Code 170.640. Additionally, 170.670 speaks primarily about waivers.

1) Owner of Tanks: Corporation, partnership, and address where the or other business entity: 2) Facility: Name tanks are located:

MRC Polymers, Inc.
Name

3307 S. Lawndale Avenue
Address

Chicago IL 60623
City State Zip

Stephanie L. Strothoff / for MRC Polymers
Contact Person or Representative (312)

Project Manager 587.1021
Title Phone No.

Stephanie L. Strothoff
Signature

MRC Polymers, Inc.
Name

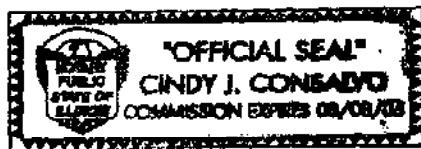
3307 S. Lawndale Avenue
Address

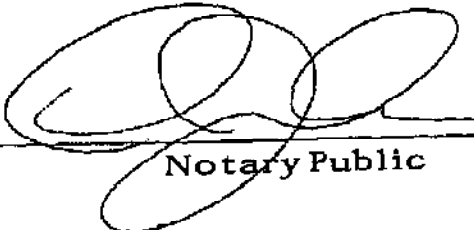
Chicago IL 60623
Zip City State

Steven Sola
Contact Person

Chief Financial officer
Title (773) 890.5505

Subscribed and sworn to before me this 16th day of
June 18 2003





Notary Public

es97

TABLE NO. 1
Soil Sample Analytical Results: BTEX & PNAs
3307 South Lawndale Avenue / Chicago, Illinois

ANALYTE	Tier 1 Soil Remediation Objectives (Tier 1 SROs)									
	Industrial/Commercial Property Use*									
	Route Specific Values					Soil Component of Groundwater Ingestion Exposure Route				
	Industrial-Commercial		Construction Worker			Inhalation		Class I		
	B-8 (9-12')	B-10 ¹ (0-3')	B-10 (6-9')	B-11 (3-6')	Ingestion	Initialion	Ingestion	Initialion	Class I	Class II
Benzene	<2.1	3	<2.5	<2.1	100,000	1,600	2,300,000	2,200	30	170
Toluene	<5.3	8.2	<6.2	<5.4	410,000,000	650,000	410,000,000	42,000	12,000	29,000
Ethylbenzene	<5.3	<5.1	<6.2	<5.4	200,000,000	400,000	200,000,000	58,000	13,000	19,000
Xylenes	<5.3	<5.1	<6.2	<5.4	1,000,000,000	320,000	410,000,000	320,000	150,000	150,000

ANALYTE	Tier 1 Soil Remediation Objectives (Tier 1 SROs)									
	Industrial/Commercial Property Use*									
	Route Specific Values					Soil Component of Groundwater Ingestion Exposure Route				
	Industrial-Commercial		Construction Worker			Inhalation		Class I		
	B-8 (9-12')	B-10 (6-9')	B-11 (3-6')	Ingestion	Initialion	Ingestion	Initialion	Class I	Class II	Class III
Naphthalene	<380	<490	<400	41,000,000	270,000	4,100,000	1,800	12,000	18,000	18,000
Acenaphthene	<380	<490	<400	120,000,000	-	120,000,000	-	570,000	2,900,000	2,900,000
Anthracene	<380	<490	<400	610,000,000	-	610,000,000	-	12,000,000	59,000,000	59,000,000
Fluoranthene	<380	<490	<400	82,000,000	-	82,000,000	-	4,300,000	21,000,000	21,000,000
Pyrene	<380	<490	<400	82,000,000	-	82,000,000	-	560,000	2,900,000	2,900,000
Pyrene	<380	<490	<400	61,000,000	-	61,000,000	-	4,200,000	21,000,000	21,000,000
CARCINOGENIC PNAs										
Benz(a)anthracene	<380	<490	<400	8,000	-	170,000	-	2,000	8,000	8,000
Benz(a)pyrene	<70	<88	72	800	-	17,000	-	8,000	82,000	82,000
Benz(b)fluoranthene	<380	<490	<400	8,000	-	170,000	-	5,000	25,000	25,000
Benz(k)fluoranthene	<380	<490	<400	75,000	-	1,700,000	-	49,000	250,000	250,000
Chrysene	<380	<490	<400	750,000	-	17,000,000	-	160,000	800,000	800,000
Dibenz(a,h)anthracene	<70	<88	<72	800	-	17,000	-	2,000	7,600	7,600
Indeno(1,2,3-cd)pyrene	<380	<490	<400	8,000	-	170,000	-	14,000	69,000	69,000
Noncarcinogenic PNAs										
Acenaphthylene	<380	<490	<400	-	-	-	-	-	-	-
Benz(g,h,i)perylene	<380	<490	<400	-	-	-	-	-	-	-
Phenanthrene	<380	<490	<400	-	-	-	-	-	-	-

Notes: Results listed in µg/kg (parts per billion)
EPA test method SW846, §310.8270
"c" indicates not detected at stated detection limits
"n.d." indicates value not available
Shaded/Bolded cell indicates value exceeds the most stringent Tier 1 SRO
* Pursuant to 35 IAC 142-Tiered Approach to Corrective Action Objectives (Appendix B, Table B)



UNDERGROUND STORAGE TANK PERMIT

Permit Number

107470

CITY OF CHICAGO DEPARTMENT OF ENVIRONMENT

ENFORCEMENT AND COMPLIANCE DIVISION

30 NORTH LASALLE, ROOM 2500, CHICAGO, IL 60602

UNDERGROUND STORAGE TANK UNIT

Contractor (Name & Address)

PIONEER ENVIRONMENTAL INC
700 N SACRAMENTO BLVD., ST. 100
CHICAGO, IL 60612
Registration No. IL-366

Facility (Name & Address)

PLASTICS RECYCLING /MANUFAC.
3307 S LAWDALE
Chicago, IL 60623
Facility ID: 3307SLA

Type of Permit: REMOVE

Number of tanks: 3

Tank Size(s): 260 2000 15000

Effective Date: 07/25/2003

Expiration Date: 01/25/2004

Fee: \$100.00

Comments: PRE-74 Methanol, Naphtha and Gasoline

PURSUANT to the Illinois Revised Statutes, Chapter 127 1/2, Paragraph 9, and the City of Chicago-State of Illinois Delegation Agreement, PERMISSION is hereby granted to remove, install, abandon-in-place, repair (including upgrade), or temporarily close underground storage tank(s) or system(s). This permit may be revoked at any time. Permit is not transferrable, nor does it constitute a waiver of liability for responsibilities under Federal, State or Municipal laws or regulations. The DISPLAY COPY of this permit is required to be present at the site while any work is in progress.

*For
30 N. LaSalle
6/3/04*

7. Marcia Jimenez
COMMISSIONER

Display Copy



UNDERGROUND STORAGE TANK PERMIT

Permit Number

107477

CITY OF CHICAGO DEPARTMENT OF ENVIRONMENT

ENFORCEMENT AND COMPLIANCE DIVISION

30 NORTH LASALLE, ROOM 2500, CHICAGO, IL 60602

UNDERGROUND STORAGE TANK UNIT

Contractor (Name & Address)

PIONEER ENVIRONMENTAL INC
700 N SACRAMENTO BLVD., ST. 100
CHICAGO, IL 60612
Registration No. IL-366

Facility (Name & Address)

PLASTICS RECYCLING /MANUFAC.
3307 S LAWDALE
Chicago, IL 60623
Facility ID: 3307SLA

Type of Permit: ABANDON

Number of tanks: 1

Tank Size(s): 10000

Effective Date: 07/14/2003

Expiration Date: 01/14/2004

Fee: \$100.00

Comments: Tank located under sewer line & overhead electric

PURSUANT to the Illinois Revised Statutes, Chapter 127 1/2, Paragraph 9, and the City of Chicago-State of Illinois Delegation Agreement, PERMISSION is hereby granted to remove, install, abandon-in-place, repair (including upgrade), or temporarily close underground storage tank(s) or system(s). This permit may be revoked at any time. Permit is not transferrable, nor does it constitute a waiver of liability for responsibilities under Federal, State or Municipal laws or regulations. The DISPLAY COPY of this permit is required to be present at the site while any work is in progress.

Mon 29th

[Signature]
COMMISSIONER

Display Copy



MRC

Business Solutions through Compounding
QS 9000A21 A REGISTERED

MRC Polymers, Inc.

3307 South Lawndale Avenue
Chicago, Illinois 60623
773-890-9000 FAX 773-890-9007

December 19, 2003

SET Environmental, Inc.
450 Sumac
Wheeling, Illinois
ATTN: Mr. J.R. Bonnett

RE: Waste Manifests
MRC Polymers
3307 S. Lawndale
Chicago, Illinois

Dear Mr. Bonnett:

In order to facilitate the disposal of the UST contents from our site during UST removal activities, this letter serves as formal authorization to allow personnel of Pioneer Engineering & Environmental Services, Inc., to sign any required forms or waste manifests on behalf of MRC (the Generator) from the above captioned site.

Sincerely,

Daniel Eberhardt, President

SEP-16-2003 16:23

SET ENVIRONMENTAL

847 537 9265 P.01

SET Environmental, Inc.

Your partner in Environmental Management

450 Sumac Road

Wheeling, Illinois 60090

Tel: (847) 537-9221 • Fax (847) 537-9265

24-Hour Emergency # 1-877-43SPILL

Fax Cover Sheet

To: JR
Barnet

From: Joe Kelly
Company: Pioneer East
Fax #: 312-587-8210

From: Jay Sturges
Subject: Baiter G. MRC
Date: 9/5/03

Pages: 4, including this cover sheet

Comments:

2 profiles; have generator on 2nd page of Baiter G.
profile & bottom of 1 sheet, Baiter G. MRC
profile and return on file.

Thanks

[Signature]

Service Locations in...

Houston, TX

Wheeling, IL

Bridgeview, IL

SEP-03-2003 16:23

SET ENVIRONMENTAL BEAVER OIL COMPANY WASTE SURVEY FORM

847 537 9265 P.82

NOTICE: 40 CFR 261.127. ACCEPTANCE OF THE GENERATOR'S WASTE INDICATES THAT BEAVER OIL HAS THE APPROPRIATE PERMITS FOR AND WILL ACCEPT THE WASTE THE GENERATOR IS SHIPPING.

GENERATOR NAME: MRC Polymers
FACILITY ADDRESS: 3307 S. Lawdale
Chicago, IL 60632
SILING NAME & ADDRESS IF DIFFERENT THAN GENERATOR: SET Environmental Inc.
450 Sumac Rd
Wheeling, IL 60090

FACILITY CONTACT: Steve Sola
PHONE: 773-890-5505
EPA ID # 6216578001
EPA ID # ELR000122986
MANIFEST MARKING ADDRESS IF DIFFERENT THAN GENERATOR:

NAME OF WASTE: Petroleum Naphtha
PROCESS GENERATING WASTE: DET pumpout
IS THIS A US EPA HAZARDOUS WASTE (40 CFR 261)? YES ☒ NO ☐ IF YES, ATTACH LAND DISPOSAL CERTIFICATION
PLEASE PROVIDE APPLICABLE HAZARDOUS WASTE CODES:

BROKER: SET Environmental CONTACT: Jay Stargis PHONE: 847-537-9221

PHYSICAL/CHEMICAL CHARACTERISTICS OF WASTE					
COLOR <u>Brown</u>	ODOR <input checked="" type="checkbox"/> NONE <input type="checkbox"/> MILD <input type="checkbox"/> STRONG	PHYSICAL STATE @ 70°F <input type="checkbox"/> SOLID <input checked="" type="checkbox"/> SEMI-SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> POWDER	LAYERS <input type="checkbox"/> MULTILAYERED <input type="checkbox"/> B-LAYERED <input checked="" type="checkbox"/> SINGLE PHASED	SOLIDS PERCENTAGE <input type="checkbox"/> ≤ 5% <input type="checkbox"/> 5.1-20% <input type="checkbox"/> 20.1-60% <input type="checkbox"/> 60.1-80% <input type="checkbox"/> 80.1-100%	
SPECIFIC GRAVITY <input checked="" type="checkbox"/> 4.0-5.0 <input type="checkbox"/> 5.1-10.0 <input type="checkbox"/> 10.1-15.0 <input type="checkbox"/> 15.1-20.0 <input type="checkbox"/> 20.1-25.0 <input type="checkbox"/> 25.1-30.0 <input type="checkbox"/> 30.1-35.0 <input type="checkbox"/> 35.1-40.0 <input type="checkbox"/> 40.1-45.0 <input type="checkbox"/> 45.1-50.0 <input type="checkbox"/> 50.1-55.0 <input type="checkbox"/> 55.1-60.0 <input type="checkbox"/> 60.1-65.0 <input type="checkbox"/> 65.1-70.0 <input type="checkbox"/> 70.1-75.0 <input type="checkbox"/> 75.1-80.0 <input type="checkbox"/> 80.1-85.0 <input type="checkbox"/> 85.1-90.0 <input type="checkbox"/> 90.1-95.0 <input type="checkbox"/> 95.1-100.0 <input type="checkbox"/> NA		FLASH POINT <input type="checkbox"/> 100-150°F <input type="checkbox"/> 151-200°F <input type="checkbox"/> 201-250°F <input type="checkbox"/> 251-300°F <input type="checkbox"/> 301-350°F <input type="checkbox"/> 351-400°F <input type="checkbox"/> 401-450°F <input type="checkbox"/> 451-500°F <input type="checkbox"/> 501-550°F <input type="checkbox"/> 551-600°F <input type="checkbox"/> 601-650°F <input type="checkbox"/> 651-700°F <input type="checkbox"/> 701-750°F <input type="checkbox"/> 751-800°F <input type="checkbox"/> 801-850°F <input type="checkbox"/> 851-900°F <input type="checkbox"/> 901-950°F <input type="checkbox"/> 951-1000°F <input type="checkbox"/> NA	REACTIVITY <input type="checkbox"/> EXPLOSIVE <input type="checkbox"/> SHOCK SENSITIVE <input type="checkbox"/> RADIOACTIVE <input type="checkbox"/> TOXICOLOGICAL <input checked="" type="checkbox"/> NA		
CHEMICAL COMPOSITION (TOTAL MUST BE 100%) <u>Petroleum Naphtha</u> <u>100%</u>				OTHER COMPONENTS - TOTAL 100% CYANIDES <u>0%</u> PESTICIDES <u>0%</u> SLURRIES <u>0%</u> HERBICIDES <u>0%</u> PCBs <u>0%</u> CHLORINE <u>0%</u>	

METHOD OF SHIPMENT: ☒ BULK LIQUID ☐ DRUM (TYPE/SIZE)
ANTICIPATED VOLUME PER: 1,000 GALLONS ☒ ONE TIME ☐ QUARTER ☐ MONTH
☐ WEEK ☐ YEAR
IS THIS A DOT HAZARDOUS WASTE? YES ☐ NO ☒ IF YES, HAZARDOUS CLASS:
PROPER DOT SHIPPING NAME: Petroleum Distillates, n.p.s. (Petroleum Naphtha)

APPROVED BY: [Signature] DATE: WASTE CLASS:
APPROVAL #:
REV CODES:

ISS: 3/97

SEP 1 1997

SEP-09-2003 16:24
WASTE CHARACTERISTICS

SET ENVIRONMENTAL

847 537 9255 P.03

TABLE 40 CFR 261.14: MAXIMUM CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC
G = DETERMINATION MADE BY GENERATOR INVESTIGATION / A = DETERMINATION MADE BY ACTUAL ANALYSIS

TO THE GENERATOR: ANY WASTE WHICH CONTAINS CONSTITUENTS IN CONCENTRATIONS ABOVE THE REGULATORY LEVEL SHOWN CONSTITUTES THAT WASTE AS A HAZARDOUS WASTE.

CONSTITUENT	REGULATORY LEVEL (mg/L)	CONCENTRATION (mg/L)	G	A	CONSTITUENT	REGULATORY LEVEL (mg/L)	CONCENTRATION (mg/L)	G	A
ARSENIC	5.0	<5.0			HEXACHLOROCYCLOPENTADIENE	0.13	<0.13		
BARIUM	100.0	<100.0			HEXACHLOROCYCLOPENTADIENE	0.5	<0.5		
BENZENE	0.5	<0.5			HEXACHLOROCYCLOPENTADIENE	2.0	<2.0		
CADMIUM	1.0	<1.0			LEAD	5.0	<5.0		
CARBON TETRACHLORIDE	0.5	<0.5			LINDANE	0.5	<0.5		
CHLORANE	0.05	<0.05			MERCURY	0.2	<0.2		
CHLOROBENZENE	100.0	<100.0			METHYLENE CHLORIDE	120.0	<120.0		
CHLOROPENTANE	0.0	<0.0			METHYL ETHYL KETONE	200.0	<200.0		
CHROMIUM	5.0	<5.0			NITROBENZENE	2.0	<2.0		
O-CRESOL	200.0 (*)	<200.0 (*)			PENTACHLOROPHENOL	100.0	<100.0		
M-CRESOL	200.0 (*)	<200.0 (*)			PYRIDINE	5.0	<5.0		
P-CRESOL	200.0 (*)	<200.0 (*)			SELENIUM	1.0	<1.0		
CRESOL	200.0 (*)	<200.0 (*)			SILVER	5.0	<5.0		
2,4-DICHLOROPHENYL ACETIC ACID	10.0	<10.0			TETRAETHYLENE	0.7	<0.7		
1,2-DICHLOROBENZENE	7.0	<7.0			THIOCARBONATE	0.3	<0.3		
1,2-DICHLOROPENTANE	0.5	<0.5			TRICHLOROETHYLENE	0.7	<0.7		
1,1-DICHLOROETHYLENE	0.7	<0.7			2,4,6-TRICHLOROPHENOL	400.0	<400.0		
2,4-DINITROPHENOL	5.13	<5.13			2,4,6-TRICHLOROPHENOL	2.0	<2.0		
ENDRIN	0.01	<0.01			2,4,6-TRICHLOROPHENOL	1.0	<1.0		
HEPTACHLOR (and its isomers)	0.005	<0.005			VINYL CHLORIDE	0.2	<0.2		

(*) : IF O-, M-, AND P-CRESOL CONCENTRATIONS CANNOT BE DIFFERENTIATED, THE TOTAL CRESOL CONCENTRATION IS USED.

TOTAL METAL ANALYSIS

METAL	PPM	METAL	PPM	METAL	PPM	METAL	PPM
ARSENIC		CHROMIUM		CELESIUM		IRON	
BARIUM		MERCURY		SILVER		ZINC	
CADMIUM		LEAD		COPPER		IRON	

IS THIS WASTE CLASSIFIED AS A P001-P005, F001, D001, D002, OR D012-D043 WASTE? YES NO

IF YES, ENTER UNDERLYING HAZARDOUS CONSTITUENTS AND THEIR CONCENTRATIONS:

CHECK THE APPROPRIATE TOXIC CONCENTRATION: ☒ > 1% ☐ < 1%

GENERIC WASTE OPERATIONS CERTIFICATION:

DOES THIS WASTE CONTAIN BENZENE WHICH IS REQUIRED TO BE MANAGED AND TREATED IN ACCORDANCE WITH THE PROVISIONS OF 40 CFR 61.042 SUBPART (1)(2)? YES NO

IF YES, ENTER THE FLOW-WEIGHTED ANNUAL AVERAGE BENZENE CONCENTRATION (mg/L) AND/OR THE TOTAL ANNUAL BENZENE QUANTITY IN ALL WASTE STREAMS (lb/YEAR)

GENERATOR'S CERTIFICATION:

I HEREBY CERTIFY THAT ALL INFORMATION WHICH I HAVE PROVIDED ABOVE DESCRIBES THE WASTE STREAM THAT IS BEING OR IS PROPOSED TO BE SENT TO REVERI OIL COMPANY'S HOOVER, ILLINOIS AND/OR GARY, INDIANA FACILITY. I UNDERSTAND IT IS MY RESPONSIBILITY TO PROPERLY IDENTIFY AND CLASSIFY MY MATERIAL IN ACCORDANCE WITH STATE AND/OR FEDERAL REGULATIONS. I ALSO CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

AUTHORIZED SIGNATURE

[Signature]

TITLE

[Signature]

DATE

[Signature] 9/16/03

REV. 3/77

SM-7005

(M17) 987 A7061M 452:50 00-60-1-1M
TOTAL P.84

262 252 2817

Shaded type _____ O&A ()

Black Technology

THE UNIVERSITY OF CHICAGO

Country's Best Employment (where you work is location)

Alfred - ~~\$50,000.00~~ ~~PA~~

Year: 2016 MLC Holger

confidentiality _____ Dr. Z. G. G. G.

Attn: 3307 S. Broadway

Volume: 847-237-9221 Fax: 847-837-1225

Dr. Shyng : Mr. Tolson : 44-60233

~~Order 100-51219-4~~

Contract Steve Job

Project Summary Information

[illegible]**Work Status Description: Self-employed**

States Requirements:

Volume 7, 670 pp.

Discussion Points

Fernando's Flyer: Dreams

() 16 gals/day	() 33 gals/day
() 39 gals/day	(✓) 80 gals/day

Index

Comments

Pr. Lubin / Hoffman

Insurance Corporation of New York

2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, 102, 104, 106, 108, 110, 112, 114, 116, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186, 188, 190, 192, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234, 236, 238, 240, 242, 244, 246, 248, 250, 252, 254, 256, 258, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 288, 290, 292, 294, 296, 298, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408, 410, 412, 414, 416, 418, 420, 422, 424, 426, 428, 430, 432, 434, 436, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 488, 490, 492, 494, 496, 498, 500, 502, 504, 506, 508, 510, 512, 514, 516, 518, 520, 522, 524, 526, 528, 530, 532, 534, 536, 538, 540, 542, 544, 546, 548, 550, 552, 554, 556, 558, 560, 562, 564, 566, 568, 570, 572, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800, 802, 804, 806, 808, 810, 812, 814, 816, 818, 820, 822, 824, 826, 828, 830, 832, 834, 836, 838, 840, 842, 844, 846, 848, 850, 852, 854, 856, 858, 860, 862, 864, 866, 868, 870, 872, 874, 876, 878, 880, 882, 884, 886, 888, 890, 892, 894, 896, 898, 900, 902, 904, 906, 908, 910, 912, 914, 916, 918, 920, 922, 924, 926, 928, 930, 932, 934, 936, 938, 940, 942, 944, 946, 948, 950, 952, 954, 956, 958, 960, 962, 964, 966, 968, 970, 972, 974, 976, 978, 980, 982, 984, 986, 988, 990, 992, 994, 996, 998, 1000, 1002, 1004, 1006, 1008, 1010, 1012, 1014, 1016, 1018, 1020, 1022, 1024, 1026, 1028, 1030, 1032, 1034, 1036, 1038, 1040, 1042, 1044, 1046, 1048, 1050, 1052, 1054, 1056, 1058, 1060, 1062, 1064, 1066, 1068, 1070, 1072, 1074, 1076, 1078, 1080, 1082, 1084, 1086, 1088, 1090, 1092, 1094, 1096, 1098, 1100, 1102, 1104, 1106, 1108, 1110, 1112, 1114, 1116, 1118, 1120, 1122, 1124, 1126, 1128, 1130, 1132, 1134, 1136, 1138, 1140, 1142, 1144, 1146, 1148, 1150, 1152, 1154, 1156, 1158, 1160, 1162, 1164, 1166, 1168, 1170, 1172, 1174, 1176, 1178, 1180, 1182, 1184, 1186, 1188, 1190, 1192, 1194, 1196, 1198, 1200, 1202, 1204, 1206, 1208, 1210, 1212, 1214, 1216, 1218, 1220, 1222, 1224, 1226, 1228, 1230, 1232, 1234, 1236, 1238, 1240, 1242, 1244, 1246, 1248, 1250, 1252, 1254, 1256, 1258, 1260, 1262, 1264, 1266, 1268, 1270, 1272, 1274, 1276, 1278, 1280, 1282, 1284, 1286, 1288, 1290, 1292, 1294, 1296, 1298, 1300, 1302, 1304, 1306, 1308, 1310, 1312, 1314, 1316, 1318, 1320, 1322, 1324, 1326, 1328, 1330, 1332, 1334, 1336, 1338, 1340, 1342, 1344, 1346, 1348, 1350, 1352, 1354, 1356, 1358, 1360, 1362, 1364, 1366, 1368, 1370, 1372, 1374, 1376, 1378, 1380, 1382, 1384, 1386, 1388, 1390, 1392, 1394, 1396, 1398, 1400, 1402, 1404, 1406, 1408, 1410, 1412, 1414, 1416, 1418, 1420, 1422, 1424, 1426, 1428, 1430, 1432, 1434, 1436, 1438, 1440, 1442, 1444, 1446, 1448, 1450, 1452, 1454, 1456, 1458, 1460, 1462, 1464, 1466, 1468, 1470, 1472, 1474, 1476, 1478, 1480, 1482, 1484, 1486, 1488, 1490, 1492, 1494, 1496, 1498, 1500, 1502, 1504, 1506, 1508, 1510, 1512, 1514, 1516, 1518, 1520, 1522, 1524, 1526, 1528, 1530, 1532, 1534, 1536, 1538, 1540, 1542, 1544, 1546, 1548, 15

Send your inquiries: **Michael J. Givens III, Bookish Air, Mountaineer Books, 1704** **Alameda • (612) 344-9900**

1. The first step is to identify the problem or goal. This involves understanding the current situation, identifying the key issues, and determining the desired outcome.

Van Der Valk

1000

Steven Solb

2/14/03

Child Developmental Profile

P. 84

SET ENVIRONMENTAL

SEE INSTRUCTIONS ON REVERSE SIDE OF COPY 6.



STATE OF WISCONSIN

Chapter 291, Wis. Stats.

Form 4400-66P

Rev. 1-99

**ALL COPIES MUST BE LEGIBLE,
PLEASE TYPE**

State of Wisconsin
Department of Natural Resources
Bureau of Waste Management
Box 8094
Madison, WI 53708

FOR DNR USE ONLY

Form designed for use on elite (12-pitch) typewriter.

Form Approved, OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILR000122986	Manifest Document No. 22430	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address MRC POLYMERS 3307 SOUTH LAWNDALE CHICAGO, IL 60632- 4. Generator's Phone (773) 800-5505		Site Location If Different		A. State Manifest Document Number WI K322430		
5. Transporter 1 Company Name SET ENVIRONMENTAL, INC.		6. US EPA ID Number ILD981957236		B. State Generator's ID 0316576051		
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID 11057		
9. Designated Facility Name and Site Address BRENNTAG GREAT LAKES LLC. N59 W14763 BOBOLINK AVE MENOMONEE FALLS, WI 53051		10. US EPA ID Number WID023350192		D. Transporter's Phone 847-224-1224		
				E. State Transporter's ID		
				F. Transporter's Phone		
				G. State Facility's ID 051330001		
				H. Facility's Phone (482) 332-1850		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	Type	13. Total Quantity	14. Unit wt/vol	15. Waste No.
a. NO WASTE METHANOL 37 UN1230; PGII; (D001, U154)		001	TT	04600	9	0001
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above 11a. METHANOL 40224022				K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information 11a. ERG# 131 LAND BAN ATTACHED EMERGENCY CONTACT # 877-437-7455						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name & Position Title Joe Kelly / Director for MRC		Signature [Signature]		Date Month Day Year 12/24/03		
17. TRANSPORTER 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name & Position Title Harley Klinek		Signature [Signature]		Date Month Day Year 12/24/03		
18. TRANSPORTER 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name & Position Title		Signature		Date Month Day Year		
19. Discrepancy Indication Space						
20. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name & Position Title		Signature		Date Month Day Year		

PA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution:

1 - Generator send to Wis. DNR

2 - Generator retain

3 - Facility send to Wis. DNR

Copies 1 & 3 mail to Wis. DNR at above address.

4 - Facility retain

5 - Facility send to Generator

6 - Transporter retain

Emergency 24 Hour Assistance
and Spill Reporting

Telephone Number: (800) 943-0003 GENERATOR SEND TO WI DNR

COPY 1 -

THE INSTRUCTIONS ON REVERSE SIDE OF COPY 6.



STATE OF WISCONSIN

Chapter 291, Wis. Stats.

Form 4400-66P

Rev. 1-99

**ALL COPIES MUST BE LEGIBLE,
PLEASE TYPE**

State of Wisconsin
Department of Natural Resources
Bureau of Waste Management
Box 8094
Madison, WI 53708

FOR DNR USE ONLY

Form designed for use on elite (12-pitch) typewriter.

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. 110000122084		Manifest Document No. 2 12 14 12 11	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address MRC POLYMERS 110 SOUTH LAWNDALE CHICAGO, IL 60632- 4. Generator's Phone (773) 890-5505				Site Location If Different		A. State Manifest Document Number WI K322431	
5. Transporter 1 Company Name SET ENVIRONMENTAL, INC.				6. US EPA ID Number 1LD981957236		B. State Generator's ID 0116376051	
7. Transporter 2 Company Name				8. US EPA ID Number		C. State Transporter's ID 1057	
9. Designated Facility Name and Site Address BRUNNEN TAG GREAT LAKES LLC. N59 W14765 BOBOLINK AVE MENOMONEE FALLS, WI 53051				10. US EPA ID Number WID023350192		D. Transporter's Phone (773) 890-5505	
						E. State Transporter's ID	
						F. Transporter's Phone	
						G. State Facility's ID 055130001	
						H. Facility's Phone (920) 254-3550	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NO WASTE METHANOL 3; UN1230; PGH1; (D001, U154)				001	TT	04000	G
b.							
c.							
d.							
J. Additional Descriptions for Materials Listed Above 11002403B				K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information P12, ERM# 131 LAND BAN ATTACHED EMERGENCY CONTACT # 877-437-7455							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and selected the best waste management method that is available to me and that I can afford.							
Printed/Typed Name & Position Title J. Kelly PM for MRC				Signature <i>[Signature]</i>		Date Month Day Year 11 24 2003	
17. TRANSPORTER 1 Acknowledgement of Receipt of Materials Printed/Typed Name & Position Title Eric Canatay				Signature <i>[Signature]</i>		Date Month Day Year 12 26 2003	
18. TRANSPORTER 2 Acknowledgement of Receipt of Materials Printed/Typed Name & Position Title				Signature		Date Month Day Year	
19. Discrepancy Indication Space							
20. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name & Position Title				Signature		Date Month Day Year	

PA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution: 1 - Generator send to Wis. DNR

4 - Facility retain

Emergency 24 Hour Assistance
and Spill Reporting

COPY 1 -

2 - Generator retain

5 - Facility send to Generator

3 - Facility send to Wis. DNR

6 - Transporter retain

Copies 1 & 3 mail to Wis. DNR at above address.

Telephone Number: (800) 943-0003 GENERATOR SEND TO WI DNR



STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 881

IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. IL0000112986		Manifest Document No. 302	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address POLYMERS 2107 NORTH LAWDALE CHICAGO, IL 60632		Location if Different		A. Illinois Manifest Document Number IL10773927 FEE PAID IF APPLICABLE			
4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS: 877-437-7455		6. US EPA ID Number IL0081957236		B. Generator's IL ID Number 03060000000000000000			
5. Transporter 1 Company Name SEE ENVIRONMENTAL, INC.		8. US EPA ID Number		C. Transporter's ID Number UPM-332773-IL			
7. Transporter 2 Company Name		10. US EPA ID Number		D. Transporter's Phone (647) 537-9221			
9. Designated Facility Name and Site Address CRATER OIL CO., INC. 603 LENEZ AVENUE ROCKFORD, IL 60052		10. US EPA ID Number IL0054418353		E. Transporter's ID Number			
				F. Transporter's Phone ()			
				G. Facility's IL ID Number 030112800001			
				H. Facility's Phone (708) 354-4040			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol	1. Waste No.
a. PETROLEUM DISTILLATES, N.O.S. (PETROLEUM NAPHTHA)				1	1308		EPA HW Number
b.							EPA HW Number
c.							EPA HW Number
d.							EPA HW Number
J. Additional Description for Materials Listed Above 11b. PETROLEUM NAPHTHA; #;				K. Handling Codes for Wastes Listed Above in Item #14			
15. Special Handling Instructions and Additional Information 11a. HPCW 125 GENERATOR'S PHONE: 1-773-818-5501							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name J. J. KELLY				Signature [Signature]		Date Month Day Year APRIL 1990	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature [Signature]		Date Month Day Year APRIL 1990	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature [Signature]		Date Month Day Year APRIL 1990	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.						Date Month Day Year APRIL 1990	
Printed/Typed Name				Signature			

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1804 and 1921, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 5. GENERATOR MAIL TO IEPA
(RCRA HAZARDOUS AND PCB WASTES ONLY)

Generators Certification

Note: If you are a generator of restricted waste a copy of this notice must accompany each shipment in accordance with 40 CFR 268.7 (a)(1).

Manifest Number Associated with this shipment: WZK 322431

Any Additional EPA Waste Codes Please List: U154

Is this waste ☒ Non-wastewater or ☐ Wastewater? (Check one) (See 40 CFR 266.2)

Universal Treatment Standards (40 CFR - 268.48)

Please check appropriate boxes:

Regulated Constituent	Waste-water	Non-waste water	Regulated Constituent	Waste-water	Non-waste water
<input type="checkbox"/> Acetone	0.25	150	<input type="checkbox"/> Benzene	0.12	10
<input type="checkbox"/> n-Butyl Alcohol	5.6	2.6	<input type="checkbox"/> Carbon Disulfide	5.5	N/A
<input type="checkbox"/> Carbon Tetrachloride	0.057	6.0	<input type="checkbox"/> Chlorobenzene	0.057	6.0
<input type="checkbox"/> Chloroform	0.046	6.0	<input type="checkbox"/> o-Cresols	0.11	3.6
<input type="checkbox"/> m-Cresols	0.77	5.6	<input type="checkbox"/> Cyclohexanone	0.56	0.75*
<input type="checkbox"/> m-Dichlorobenzene	0.036	6.0	<input type="checkbox"/> o-Dichlorobenzene	0.085	6.0
<input type="checkbox"/> 1,2 - Dichloroethane	0.21	6.0	<input type="checkbox"/> 1,1 - Dichloroethylene	0.022	6.0
<input type="checkbox"/> 2,4 - Dinitrotoluene	0.32	140	<input type="checkbox"/> Ethyl Acetate	0.54	33
<input type="checkbox"/> Ethyl Benzene	0.057	10	<input type="checkbox"/> Ethyl Ether	0.12	150
<input type="checkbox"/> Hexachlorobenzene	0.055	10	<input type="checkbox"/> Hexachlorobutadiene	0.055	3.5
<input type="checkbox"/> Hexachloroethane	0.005	30	<input type="checkbox"/> Isobutyl Alcohol	5.6	170
<input checked="" type="checkbox"/> Methanol	5.6	0.75*	<input type="checkbox"/> Methylene Chloride	0.089	30
<input type="checkbox"/> Methyl Ethyl Ketone	0.26	35	<input type="checkbox"/> Methyl Isobutyl Ketone	0.11	33
<input type="checkbox"/> Nitrobenzene	0.068	14	<input type="checkbox"/> Pentachlorophenol	0.000	7.3
<input type="checkbox"/> Pyridine	0.014	15	<input type="checkbox"/> Tetrachloroethylene	0.056	6.0
<input type="checkbox"/> Toluene	0.080	10	<input type="checkbox"/> 1,1 - Trichloroethane	0.054	6.0
<input type="checkbox"/> 1,1,2 - Trichloroethane	0.054	6.0	<input type="checkbox"/> 1,1,2 - Trichloro-1,1,2 - Trifluoroethane	0.027	30
<input type="checkbox"/> Trichloroethylene	0.054	6.0	<input type="checkbox"/> Trichlorofluoromethane	0.020	30
<input type="checkbox"/> 2,4,5 - Trichlorophenol	0.15	7.4	<input type="checkbox"/> 2,4,5 - Trichlorophenol	0.035	7.4
<input type="checkbox"/> Xylene	0.32	30	<input type="checkbox"/> Vinyl Chloride	0.27	6.0
<input type="checkbox"/> Arsenic (D004)	1.4	3.0*	<input type="checkbox"/> Barium (D005)	1.2	7.6*
<input type="checkbox"/> Cadmium (D006)	0.69	0.19*	<input type="checkbox"/> Chromium (total) (D007)	1.7	0.56*
<input type="checkbox"/> Lead (D008)	0.69	0.17*	<input type="checkbox"/> Mercury (D009)	0.15	0.025*
<input type="checkbox"/> Selenium (D010)	0.32	0.10*	<input type="checkbox"/> Silver (D011)	0.43	0.30*

*Concentrations expressed as mg/L and are measured through analysis of TCLP extracts; all others measured through total waste analysis.

Waste Code	Waste Description and Treatment Regulatory Subcategory	Wastewater	Non-wastewater
<input type="checkbox"/> D001	Ignitable Characteristic Wastes, except for the 3261.2(a)(1) High TOC Subcategory, that are managed in non-CWA/non-CWA-equivalent Class I SDWA systems	Detect and meet 4296.48 Side; or RORGs; or CMBS	Detect and meet 3268.48 Side; or RORGs; or CMBS
<input checked="" type="checkbox"/> D001	High TOC Ignitable Characteristic Liquids Subcategory based on 40 CFR 261.2(a)(1) - Greater than or equal to 10% total organic carbon.	N/A	RORGs; or CMBS

I hereby certify that all the information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

Signature: [Signature]

Date: 12/26/03

Title: PM for MAC

Date: 12-29-03 Time: 10AM Size: SEMI Special Requirements:				Van Hoesen Industries, Inc. d/b/a North Branch Environmental 7 N 458 Garden Avenue Roselle, Illinois 60172 Phone: 630/529-0240 Fax: 630/529-0837			
Order Date:	PO Number:	Manifest Number:	Work Order No:				
12-22-03		10711836	068510				
Driver:	Disp Facility:						
KEN	KT						
Start time:	Finish Time:	Date:					
9:30	1:30	12-29-03					
Site Location:							
3307 S LAMONDALG							
CHICAGO, IL							
Contact:							
Bill To: HONES							
Contact: JOE Phone:							
Product/Service	Units/Gallons	Price	Amount				
Freight/Handling:							
Disposal:	1300						
Demurrage:							
Haz Fee:							
Analytical:							
Generator ID Numbers:							
State:							
Federal:							
Bulk Gal:	Drums:	Customer Signature					
		Other:					

Date: 12-29-03 Time: 10AM Size: SEMI Special Requirements:				Van Hoesen Industries, Inc. d/b/a North Branch Environmental 7 N 458 Garden Avenue Roselle, Illinois 60172 Phone: 630/529-0240 Fax: 630/529-0837			
Order Date:	PO Number:	Manifest Number:	Work Order No:				
12-22-03			068520				
Driver:	Disp Facility:						
RICK							
Start time:	Finish Time:	Date:					
9:45	3:30	12-29-03					
Site Location:							
3307 S LAMONDALG							
CHICAGO, IL							
Contact:							
Bill To: HONES							
Contact: JOE Phone:							
Product/Service	Units/Gallons	Price	Amount				
Freight/Handling:							
Disposal:	9120						
Demurrage:							
Haz Fee:							
Analytical:							
Generator ID Numbers:							
State:							
Federal:							
Bulk Gal:	Drums:	Customer Signature					
		Other:					

JOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81

IL532-0810

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

(Form designed for use on ellipse (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved, OMB No. 2060-0099

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address

Location if Different

A. Illinois Manifest Document Number

FEE PAID IF APPLICABLE

NORTH BRANCH ENVIRONMENTAL
7 N 438 GARDEN AVENUE
ROSELLE, IL 60170

IL10806291

4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

B. Generator's IL ID Number

C. Transporter's ID Number

5. Transporter 1 Company Name

6. US EPA ID Number

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. Transporter's ID Number

F. Transporter's Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

G. Facility's IL ID Number

BEAVER OIL COMPANY, INC.
6037 LENZI AVENUE
MONTICELLO, IL 61856

H. Facility's Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers

13. Total Quantity

14. Unit Wt/Vol

Waste No.

No.	Type	Total Quantity	Unit Wt/Vol	EPA HW Number
a.				
b.				
c.				
d.				

J. Additional Description for Materials Listed Above

K. Handling Codes for Wastes Listed Above in Item #11

CLION16

15. Special Handling Instructions and Additional Information

IN CASE OF EMERGENCY CONTACT 630/529-0240

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Date
RICH GRABINSKI	R. Grabinski	12/30/83
17. Transporter 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Date
RICH GRABINSKI	R. Grabinski	12/30/83
18. Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Date
19. Discrepancy Indication Space		
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.		
Printed/Typed Name	Signature	Date
Lee Fahner	Lee Fahner	12/30/83

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111/1/2, Section 4-604 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Emergency Management Center.

COPY 4, TRANSPORTER 1 COPY

3307 S. Fawcett Ave 900 gal
Chicago (enclosure)

In case of a spill call the Illinois Office of Emergency Response at 217 / 782-7860 and the National Response Center at 800 / 424-8802 or 202 / 426-2675.

JIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6781

State Form LFC 62 8/81

IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

(Form designed for use on elite (12-pitch) typewriter)

EPA Form B700-22 (Rev. 6-89)

Form Approved OMB No. 2050-0039

WASTE MANIFEST

1. Generator's US EPA ID No.

IL R 0 0 0 0 5 2 9 7 7

Manifest Document No.

68510

2. Page 1

of 1

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

Generator's Name and Mailing Address
NORTH BRANCH ENVIRONMENTAL
7 N 458 GARDEN AVENUE
ROSELLE, IL 60172

Location if Different

A. Illinois Manifest Document Number

IL10711836

FEE PAID IF APPLICABLE

B. Generator's IL ID Number

0 4 3 4 8 2 5 1 0 1

C. Transporter's ID Number

UPM 350461

D. Transporter's Phone

(630) 529-0240

E. Transporter's ID Number

F. Transporter's Phone ()

G. Facility's IL ID Number

9 1 8 0 8 9 7 5 7 6

H. Facility's Phone ()

4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS (630) 529-0240

5. Transporter 1 Company Name

6.

US EPA ID Number

NORTH BRANCH ENVIRONMENTAL

7.

US EPA ID Number

7. Transporter 2 Company Name

8.

US EPA ID Number

9. Designated Facility Name and Site Address

10.

US EPA ID Number

KLEANWAY TECHNOLOGIES, INC
1040 MICHIGAN AVENUE
GARY, IN 46401

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. Non-Hazardous Liquids

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt/Vol

1. Waste No.

0 0 1

TP

043.00

G

EPA HW Number

b. EPA HW Number

c. EPA HW Number

d. EPA HW Number

J. Additional Description for Materials Listed Above

K. Handling Codes for Wastes Listed Above

In Item #14

Billions

15. Special Handling Instructions and Additional Information

24 Hour Emergency Response Number: 630/529-0240

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name

KEN SEBESTA

Signature

Ken Sebesta

Date

Month Day Year

12 29 03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

KEN SEBESTA

Signature

Ken Sebesta

Date

Month Day Year

12 29 03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name

LOW FILLOSA

Signature

Low Fillosa

Date

Month Day Year

12 29 03

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1 TSP MAIL TO GENERATOR

3307 S. Lawrence
4200

Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.



700 North Sacramento Boulevard, Suite 101 • Chicago, Illinois 60612
312.587.1021 • Fax: 312.587.8210
www.pioneerenvironmental.com

January 2, 2004

Office of the Illinois State Fire Marshall
Division of Petroleum and Chemical Safety
1035 Stevenson Drive
Springfield, IL 62703-4259

RE: Amended Notification Form for USTs
3307 South Lawndale
Chicago, Illinois

To whom it may concern,

Enclosed please find the Amended Notification Form for USTs for the removal of one (historical) 250-gallon gasoline UST, and one 2,500-gallon naphtha UST on December 29, 2003, the removal of one 15,000-gallon methanol UST on December 30, 2003, and the abandonment of one 10,000-gallon heating oil UST between December 29 (cleaning) & 30 (filling), 2003, from the above captioned site.

Pioneer Engineering & Environmental Services, Inc. appreciates your time in review of this matter and if you have any questions or comments, please contact me at (312) 587-1021.

Sincerely,
PIONEER ENGINEERING & ENVIRONMENTAL SERVICES, INC.



Joseph C. Kelly, P.G.
Senior Project Manager

[Enclosures]



700 North Sacramento Boulevard, Suite 101 • Chicago, Illinois 60612
312.587.1021 • Fax: 312.587.8210
www.pioneerenvironmental.com

January 2, 2004

City of Chicago
Department of Environment
30 North LaSalle Street, 25th Floor
Chicago, IL 60602-2575

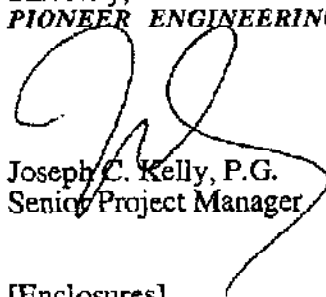
RE: Certificates of Removal & Abandonment
3307 South Lawndale
Chicago, Illinois

To whom it may concern,

Enclosed please find the Certificate of Removal for the removal of one (historical) 250-gallon gasoline UST, and one 2,500-gallon naphtha UST on December 29, 2003, the removal of one 15,000-gallon methanol UST on December 30, 2003, and the abandonment of one 10,000-gallon heating oil UST between December 29 (cleaning) & 30 (filling), 2003, from the above captioned site.

Pioneer Engineering & Environmental Services, Inc. appreciates your time in review of this matter and if you have any questions or comments, please contact me at (312) 587-1021.

Sincerely,
PIONEER ENGINEERING & ENVIRONMENTAL SERVICES, INC.



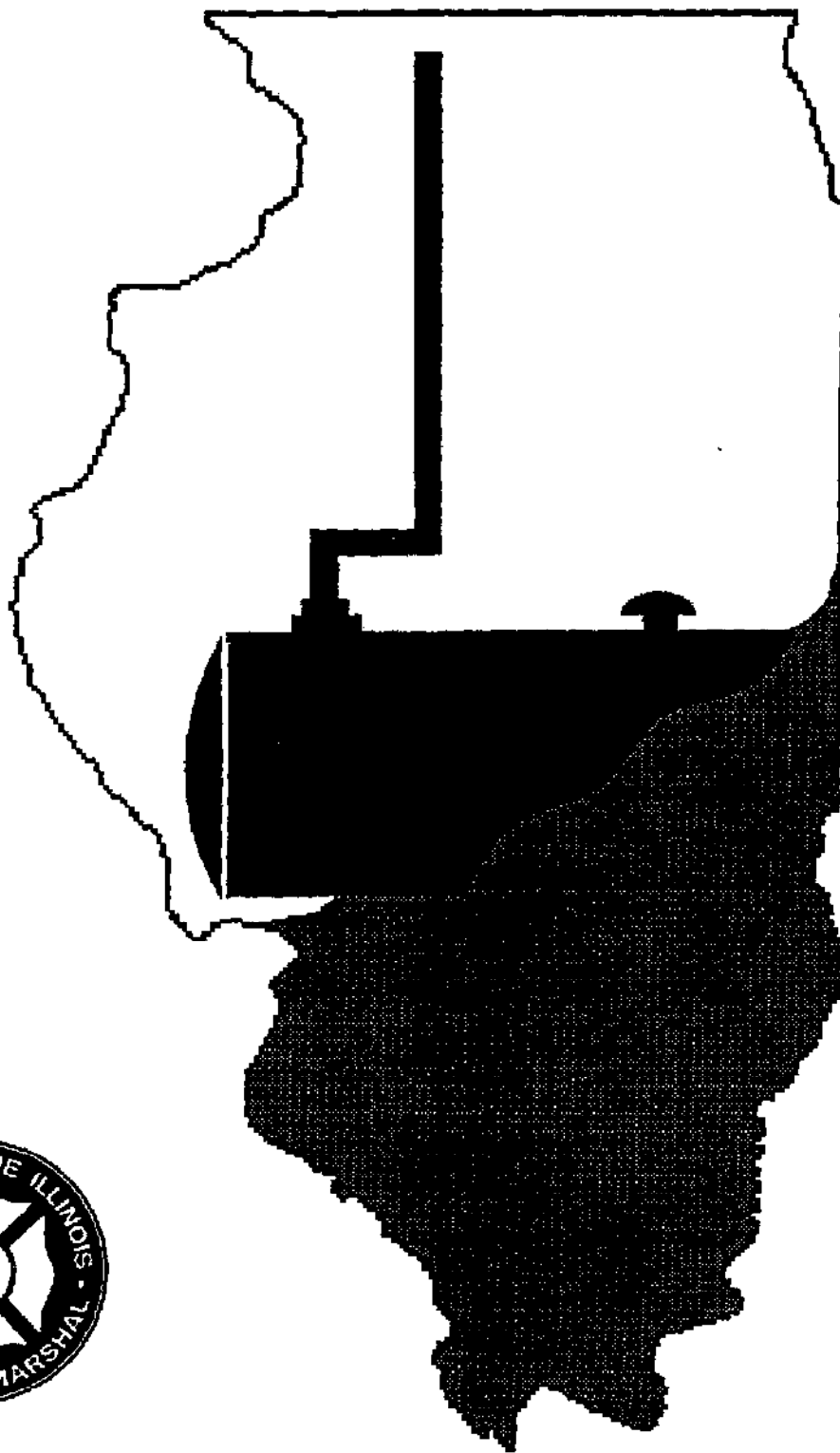
Joseph C. Kelly, P.G.
Senior Project Manager

[Enclosures]

**Office of the Illinois State Fire Marshal
Division of Petroleum and Chemical Safety**

1035 Stevenson Drive
Springfield, Illinois 62703-4259

Notification Form for Underground Storage Tanks



<div style="display: inline-block; width: 10%; background-color: black; color: white; text-align: center; font-weight: bold;">IL</div> Notification for Underground Storage Tanks		OFFICE USE ONLY
<ul style="list-style-type: none"> A separate form must be used for each site. If you have more than five tanks, photocopy pages 1-5 and attach to this notification form. Please type, or print in ink; the signature under "certification" (section IX) must be signed in ink. 		<div style="border: 1px solid black; height: 20px; margin-bottom: 5px;">ID NUMBER</div> <div style="border: 1px solid black; height: 40px;">DATE RECEIVED</div>
<div style="display: flex; justify-content: space-between;"> Facility I.D. # (if known) _____ Owner I.D. # (if known) _____ </div>		
TYPE OF NOTIFICATION		
<div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> New Facility <input type="checkbox"/> Amended (Changes/Corrections/Additional Tanks) </div> <div>Mark all that apply:</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <input type="checkbox"/> Owner Address Change (this facility only) <input type="checkbox"/> Owner Address Change (all facilities owned) <input type="checkbox"/> New Owner <input checked="" type="checkbox"/> Tank(s) Removed (Permit # <u>107470</u>) </div> <div> <input type="checkbox"/> Tanks Relined (Permit # _____) <input type="checkbox"/> Tanks Installed (Permit # _____) <input type="checkbox"/> Tanks Upgraded/Repaired (Permit # _____) <input checked="" type="checkbox"/> Abandonment Notice (Permit # <u>107477</u>) </div> </div> <div style="text-align: center; margin-top: 5px;"> <input type="checkbox"/> Other _____ </div>		
I. Ownership of Tank(s)		II. Location of Tank(s)
<u>MRC Polymers, Inc.</u> <small>Owner Name (Corp., Individual, Public Agency or other Entity)</small>		<u>mrc Polymers, Inc.</u> <small>Facility Name or Company Site Identifier, as applicable</small>
<u>3307 S. Laundale</u> <small>Mailing Address</small>		<u>3307 S. Laundale</u> <small>Street Address or State Road, as applicable (exact address)</small>
<u>Chicago</u> <u>IL</u> <u>60612</u> <small>City State Zip</small>		<u>Chicago</u> <u>IL</u> <u>60612</u> <small>City State Zip</small>
<u>Cook</u> <small>County</small>		<u>Cook</u> <small>County</small>
<u>Don Eberhardt</u> <u>773-890-9000</u> <small>Contact Name (Area Code) Phone</small>		<u>Steve Sola</u> <u>773-890-9000</u> <small>Contact Name (Area Code) Phone</small>
III. TYPE OF OWNERSHIP (mark all that apply)		
<div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Current Owner of Tanks Date Purchased <u>12/31/98</u> </div> <div> <input type="checkbox"/> Ownership Uncertain _____ </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <input type="checkbox"/> Former Owner </div> <div> <input type="checkbox"/> Other _____ </div> </div>		
IV. TYPE OF FACILITY		
<small>Type of Facility: (Circle correct code)</small>		
A. Service Station B. Bulk Plant C. Petroleum Distributor D. Convenience Store E. Auto Dealer F. Commercial/Retail	<input checked="" type="radio"/> G. Industrial/Manufacturing H. Private Institution I. Residence (Non-Farm) J. Farm K. Airport L. Marina	M. City/Town N. County O. State P. Federal (Military) Q. Federal (Non-Military) R. School District S. Port District T. Utility District U. Fire Dept. V. Other Special Service Districts W. Other _____ <small>(Please Specify)</small>

V. Description of Underground Storage Tanks (Complete entire column for each tank)					
Tank Identification Number	Tank No. <u>1</u>	Tank No. <u>2</u>	Tank No. <u>3</u>	Tank No. <u>4</u>	Tank No. <u> </u>
1. Status of Tanks					
Currently in use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporarily out of use (Section 2 must be completed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permanently out of use (Section 2 must be completed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Removed (Section 3 must be completed)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abandoned in place (Section 4 must be completed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Tanks Permanently & Temporarily Out of Use					
Estimated date last used	<u>12/31/73</u>	<u>12/31/73</u>	<u>12/31/73</u>	<u>12/31/73</u>	<u>1/1</u>
3. Tanks Removed					
Date tank(s) removed	<u>12/29/03</u>	<u>12/29/03</u>	<u>12/30/03</u>	<u>1/1</u>	<u>1/1</u>
Estimated date last used	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>
4. Abandoned in Place					
Date tanks filled	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>	<u>12/29/03</u>	<u>1/1</u>
Tank filled with:					
Inert materials (sand, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)					
5. Age of Tank					
Date tank installed	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>
Date product placed in tank	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>
6. Estimated Total Capacity (gallons)	<u>250</u>	<u>2,500</u>	<u>15,000</u>	<u>10,000</u>	
7. Substances Currently or Last Stored:					
Petroleum					
Diesel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kerosene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gasoline <i>Historical</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify) <i>Current</i>	<u>Septic</u>				
Petroleum Use (if applicable):					
Heating oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(consumptive use on premises)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Back-up generator					
Other (please specify)					
Hazardous Substance:					
Name of principal CERCLA substance		<u>Naphtha</u>	<u>Methanol</u>		
Chemical Abstract Service (CAS No)		<u>64741-41-9</u>	<u>67-56-1</u>		

VI. Description of Underground Storage Tanks (Complete entire column for each tank)					
Tank Identification Number	Tank No. <u>1</u>	Tank No. <u>2</u>	Tank No. <u>3</u>	Tank No. <u>4</u>	Tank No. <u> </u>
1. Material of Construction (mark all that apply)					
Asphalt coated or bare steel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cathodically protected steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dielectric coated steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Composite (steel with fiberglass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiberglass reinforced plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lined interior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Double-walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secondary containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steel STI-P3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<u>concrete</u> <u>encased</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
2. Piping Materials (mark all that apply)					
Bare steel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Galvanized steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiberglass reinforced plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cathodically protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Double-walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secondary containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dielectric coating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
3. Piping Type (mark all that apply)					
European suction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
American suction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gravity feed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Tank Identification Number	Tank No. ____		Tank No. ____		Tank No. ____		Tank No. ____		Tank No. ____	
	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
4. Release Detection (Mark all that apply)										
Manual tank gauging	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Inventory controls	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Automatic tank gauging	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Vapor monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groundwater monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interstitial monitoring double-walled tank/piping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interstitial monitoring /secondary containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tank tightness testing	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Automatic line leak detector		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Line tightness testing		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Automatic shut-off device		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Continuous alarm system		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
No requirements (european suction)		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Other (please specify)	_____		_____		_____		_____		_____	
5. Corrosion Protection (mark all that apply)										
Cathodic protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Impressed current	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secondary containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exterior coating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiberglass reinforced plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Double-walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interior lining	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Other (please specify)	_____		_____		_____		_____		_____	
6. Spill & Overfill Prevention (Mark all that apply)										
Overfill device	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Automatic shut-off	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Overfill Alarm	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Ball float valve	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Spill containment device	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Other (Please specify)	_____		_____		_____		_____		_____	

VII. Certification of Compliance (Complete for all new, upgraded and relined tanks at this location)

Installation (mark all that apply)

- Installer certified by tank and piping manufacturers ☐
- Installer certified or licensed by implementing agency ☐
- Installer registered by implementing agency ☐
- Installer is the owner of the tank(s) ☐
- Installation inspected by a registered engineer ☐
- Installation inspected & approved by implementing agency ☐
- Manufacturer's installation checklists have been completed ☐
- Another method allowed by state agency (please specify) _____

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OATH: I certify the information that is provided in section VII is true to the best of my knowledge, and certify that the installation was performed in accordance with all applicable state and federal laws and regulations. **(THIS SECTION MAY ONLY BE COMPLETED BY THE CONTRACTOR. SEPARATE OATH MUST BE SUBMITTED FOR EACH ACTIVITY PERFORMED BY DIFFERENT CONTRACTOR.)**

Tank No. _____

Permit No. _____

Contractor: _____

Name

Signature (must be original)

Date

Position

Company

VIII. Financial Responsibility

Mark all that apply:

☐ Self-Insurance

☐ Guarantee

☐ Certificate of Deposit

☐ Commercial Insurance

☐ Surety Bond

☐ Trust Fund

☐ Risk Retention Group

☐ Letter of Credit

☐ Other Method Allowed

(please specify) _____

IX. Certification (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete.

Joseph C. Kelly

Name and official title of owner or owner's authorized representative (print)

[Signature]
Signature (must be original)

1/2/04

Date Signed



**CITY OF CHICAGO
DEPARTMENT OF ENVIRONMENT
UNDERGROUND STORAGE TANK
30 NORTH LASALLE STREET, 25TH FLOOR**

Facility ID: 3307SLA

Permit Number: 107477

AFFIDAVIT TO BE COMPLETED BY CONTRACTOR AUTHORIZED BY THE STATE OF ILLINOIS TO PERFORM UST WORK IN THE AREA OF ABANDON. THIS FORM MUST BE RETURNED TO THE CITY OF CHICAGO (DEPARTMENT OF ENVIRONMENT) WITHIN 30 DAYS OF COMPLETION OF THE WORK.

Facility Name: PLASTICS RECYCLING /MANUFAC.

Address: 3307 S LAWDALE

Owner Company: MRC POLYMERS, INC.

Owner/Company Contact: MR STEVEN SOLA, CFO

AFFIDAVIT

I CERTIFY THAT THE ABOVE ABANDON UST(S) WORK WAS DONE IN COMPLIANCE WITH ALL APPLICABLE STATE OF ILLINOIS LAWS, REGULATIONS AND ADOPTED STANDARDS.

Contractor: (IL-366) PIONEER ENVIRONMENTAL INC

Joseph C. Kelly

Printed Name of Authorized Representative

[Signature]
Signature

Senior Project Manager

Title

Pioneer
Name of Contractor

700 N. Sacramento, #100 Chicago

Address

12/29-30/03

Completion Date

SUBSCRIBED and sworn to before me this

2nd day of *January*, *04*



[Signature]
Notary Public



Office of the Illinois State Fire Marshal
Division of Petroleum and Chemical Safety
1035 Stevenson Drive
Springfield, Illinois 62703-4259

Facility #: _____

Permit #: 107470

Certification to be completed by the tank owner or operator. This form and the amended notification form must be returned to the Office of the Illinois State Fire Marshal / Division of Petroleum and Chemical Safety within 30 days of completion of the work.

Owner: MRC Polymers, Inc. Facility: MRC Polymers, Inc.
Address: 3307 S. Lawndale Address: 3307 S. Lawndale
City: Chicago City: Chicago
State: IL Zip: 60623 County: Cook Zip: 60623

CERTIFICATION OF REMOVAL

I certify that the removal of the UST(s) listed below was conducted in accordance with all applicable rules and regulations.

Size of tank(s) removed: 250 2,500 15,000
Product stored: historical gas current septa naphtha methanol
Date Tank removed: 12/29/03 12/29/03 12/30/03

Contractor:

Name: Pioneer Eng. & Env.
Address: 700 N. Sacramento #100
City: Chicago State: IL Zip: 60612
Phone #: (312) 587-1021 Registration #: IL-366

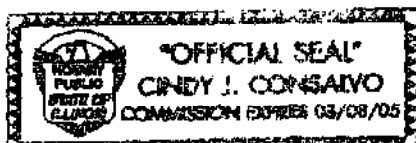
This certification shall not prohibit OSFM from conducting an independent inspection of the site and/or challenging the veracity of the owner or operator of this document.

Signature (Owner/Operator): [Signature] for MRC

Title: Senior Project Manager

Date: 1/2/2004, 19

SUBSCRIBED and sworn to before me this 2nd day of January, 19 2004



(OSFM/Jan. 94)

[Signature]
Notary Public
Martina Garcia, COOE
Storage Tank Safety Specialist Date

APPENDIX F
LABORATORY ANALYTICAL REPORTS



Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 1
 Date: 09/17/2002
 Log #: L67530-1

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-2 6-9'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
BTEX Compounds							
Benzene	BDL	ug/kg (dw)	5035/8260	3.0	09/10	09/16	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	7.5	09/10	09/16	SV
Toluene	BDL	ug/kg (dw)	5035/8260	7.5	09/10	09/16	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	7.5	09/10	09/16	SV
Total BTEX	BDL	ug/kg (dw)	5035/8260	7.5	09/10	09/16	SV
Dilution Factor	0.98		5035/8260		09/10	09/16	SV
Surrogate Recoveries:							
Dibromofluoromethane	65.0	%	5035/8260	52-155	09/10	09/16	SV
Toluene-D8	56.0	%	5035/8260	46-154	09/10	09/16	SV
4-Bromofluorobenzene	45.0	%	5035/8260	36-138	09/10	09/16	SV
Percent Solids							
Percent Solid	65	%	SM2540B	0.10	09/12	09/12	KB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 960126

SUB DON# 86122, 86109, 86048

SC CERT# 96031001

USACE

VA CERT# 00395

DOH# E86240

ADEM ID# 40850

TN CERT# 02985

GA CERT# 917

USDA Soil Permit# S-35240

NC CERT# 444

IL CERT# 200020

Respectfully submitted,

Derrick M. Simons
 Laboratory Director

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 1
 Date: 09/17/2002
 Log #: L67530-2

Sample Description:

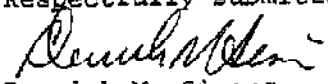
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-3 6-9'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
BTEX Compounds							
Benzene	7.4	ug/kg (dw)	5035/8260	2.6	09/10	09/16	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Toluene	7.7	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Total BTEX	15.1	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Dilution Factor	0.89		5035/8260		09/10	09/16	SV
Surrogate Recoveries:							
Dibromofluoromethane	63.0	%	5035/8260	52-155	09/10	09/16	SV
Toluene-DB	52.0	%	5035/8260	46-154	09/10	09/16	SV
4-Bromofluorobenzene	40.0	%	5035/8260	36-138	09/10	09/16	SV
Percent Solids							
Percent Solid	69	%	SM2540B	0.10	09/12	09/12	KB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4: or 5:RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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 Laboratory Director

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
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 Stephanie Strothoff

Page: Page 1 of 1
 Date: 09/17/2002
 Log #: L67530-3

Sample Description:

MRC Polymers
 Proj.#: 02448B

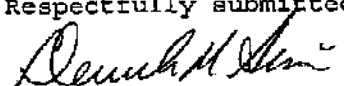
Analytical Report: B-4 9-12'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Only.		Analyst
				Limit	Date	
All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.						
Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.						
Flags: CFR-Pb/Cu rule; ND-non detect(RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code						
FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol						
FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank						
FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL						

QAP# 980126
 SUB DOH# 86122,86109,88604B
 SC CERT# 96031001
 USACE
 VA CERT# 00395

DOH# E86240
 ADEM ID# 40850
 TN CERT# 02985
 GA CERT# 917
 USDA Soil Permit# S-35240

NC CERT# 444
 IL CERT# 200020

Respectfully submitted,

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ON HOLD
 05/11/02

Client #: CHI-00-030604
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Page: Page 1 of 3
 Date: 09/17/2002
 Log #: L67530-4

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-5 9-12'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Fluoranthene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Pyrene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Benzo(a)pyrene	BDL	ug/kg (dw)	3550/8270	90	09/15	09/16	KK
Benzo(b)fluoranthene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Chrysene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	90	09/15	09/16	KK
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Dilution Factor	1.0		3550/8270		09/15	09/16	KK
Surrogate Recoveries:							
Nitrobenzene-d5	108	%	3550/8270	15-121	09/15	09/16	KK
2-Fluorobiphenyl	103	%	3550/8270	42-111	09/15	09/16	KK
Terphenyl-d14	116	%	3550/8270	37-143	09/15	09/16	KK
Metals							
Arsenic	24000	ug/kg (dw)	3050/6010	750	09/16	09/17	SB
Barium	480000	ug/kg (dw)	3050/6010	1500	09/16	09/17	SB
Cadmium	3900	ug/kg (dw)	3050/6010	1500	09/16	09/17	SB
Chromium	33000	ug/kg (dw)	3050/6010	1500	09/16	09/17	SB
Lead	1000000	ug/kg (dw)	3050/6010	1500	09/16	09/17	SB
Selenium	7000	ug/kg (dw)	3050/6010	1500	09/16	09/17	SB

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Page: Page 2 of 3
Date: 09/17/2002
Log #: L67530-4

Sample Description:

MRC Polymers
Proj.#: 02448B

Analytical Report: B-5 9-12'
Date Sampled: 09/10/2002
Time Sampled: 00:00
Date Received: 09/11/2002
Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1500	09/16	09/17	SB
Mercury	310	ug/kg (dw)	7471	150	09/17	09/17	LL
General Chemistry							
pH	7.56	pH Units	9045	0.10	09/17	09/17	PR
Percent Solids							
Percent Solid	67	%	SM2540B	0.10	09/12	09/12	KB
Volatile Organic Compounds							
MEK (2-Butanone)	BDL	ug/kg (dw)	5035/8260	64	09/10	09/16	SV
2-Hexanone	BDL	ug/kg (dw)	5035/8260	64	09/10	09/16	SV
MIBK (4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	64	09/10	09/16	SV
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	2.6	09/10	09/16	SV
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	2.6	09/10	09/16	SV
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.6	09/10	09/16	SV
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.6	09/10	09/16	SV
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	1.3	09/10	09/16	SV
Acetone	190	ug/kg (dw)	5035/8260	64	09/10	09/16	SV
Benzene	2.8	ug/kg (dw)	5035/8260	2.6	09/10	09/16	SV
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	2.6	09/10	09/16	SV
Bromoform	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Bromomethane	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	640	09/10	09/16	SV
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	64	09/10	09/16	SV
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	2.6	09/10	09/16	SV
Chloroethane	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Chloroform	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Chloromethane	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV

Client #: CHI-00-030604
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Stephanie Strothoff

Page: Page 3 of 3
Date: 09/17/2002
Log #: L67530-4

Sample Description:

MRC Polymers
Proj.#: 02448B

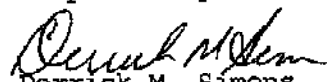
Analytical Report: B-5 9-12'
Date Sampled: 09/10/2002
Time Sampled: 00:00
Date Received: 09/11/2002
Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatile Organic Compounds (continued)							
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	13	09/10	09/16	SV
Styrene	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Toluene	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Trichloroethene	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	13	09/10	09/16	SV
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	6.4	09/10	09/16	SV
MTBE	BDL	ug/kg (dw)	5035/8260	64	09/10	09/16	SV
Dilution Factor	0.86		5035/8260		09/10	09/16	SV
Surrogate Recoveries:							
Dibromofluoromethane	90.0	%	5035/8260	52-155	09/10	09/16	SV
Toluene-D8	79.0	%	5035/8260	46-154	09/10	09/16	SV
4-Bromofluorobenzene	60.0	%	5035/8260	36-138	09/10	09/16	SV

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
Flags: CFR-Pb/Cu rule; ND-non detect(RL estimated); NPL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
SC CERT# 96031001 TN CERT# 02985
USACE GA CERT# 917
VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,


Derrick M. Simons
Laboratory Director

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 Stephanie Strothoff

Page: Page 1 of 1
 Date: 09/17/2002
 Log #: L67530-5

Sample Description:

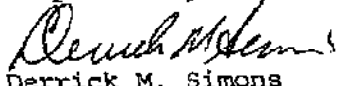
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-6 6-9'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Miscellaneous Solvents							
Methanol	BDL J3	mg/kg (dw)	DAI/8015	15	09/16	09/16	GG
Dilution Factor	1.0		DAI/8015		09/16	09/16	GG
Percent Solids							
Percent Solid	67	%	SM2540B	0.10	09/12	09/12	KB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect(RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

DAF# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

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Page: Page 1 of 1
 Date: 09/17/2002
 Log #: L67530-6

Sample Description:

MRC Polymers
 Proj.#: 02448B

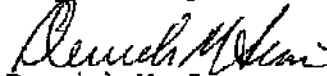
Analytical Report: B-7 6-9'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Miscellaneous Solvents							
Methanol	BDL J3	mg/kg (dw)	DAI/8015	14	09/16	09/16	GG
Dilution Factor	1.0		DAI/8015		09/16	09/16	GG
Percent Solids							
Percent Solid	72	%	SM2540B	0.10	09/12	09/12	KB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NPL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

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Page: Page 1 of 2
 Date: 09/17/2002
 Log #: L67530-7

Sample Description:

MRC Polymers
 Proj. #: 02448B

Analytical Report: B-8 9-12'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
BTEX Compounds							
Benzene	BDL	ug/kg (dw)	5035/8260	2.1	09/10	09/16	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	5.3	09/10	09/16	SV
Toluene	BDL	ug/kg (dw)	5035/8260	5.3	09/10	09/16	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	5.3	09/10	09/16	SV
Total BTEX	BDL	ug/kg (dw)	5035/8260	5.3	09/10	09/16	SV
Dilution Factor	0.92		5035/8260		09/10	09/16	SV
Surrogate Recoveries:							
Dibromofluoromethane	82.0	%	5035/8260	52-155	09/10	09/16	SV
Toluene-D8	51.0	%	5035/8260	46-154	09/10	09/16	SV
4-Bromofluorobenzene	42.0	%	5035/8260	36-138	09/10	09/16	SV
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Fluoranthene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Pyrene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Benzo(a)pyrene	BDL	ug/kg (dw)	3550/8270	70	09/15	09/16	KK
Benzo(b)fluoranthene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Chrysene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	70	09/15	09/16	KK
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	380	09/15	09/16	KK
Dilution Factor	1.0		3550/8270		09/15	09/16	KK

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Page: Page 2 of 2
 Date: 09/17/2002
 Log #: L67530-7

Sample Description:


MRC Polymers
 Proj.#: 02448B

Analytical Report: B-8 9-12'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons (continued)							
Surrogate Recoveries:							
Nitrobenzene-d5	58.0	%	3550/8270	15-121	09/15	09/16	KK
2-Fluorobiphenyl	100	%	3550/8270	42-111	09/15	09/16	KK
Terphenyl-d14	105	%	3550/8270	37-143	09/15	09/16	KK
Percent Solids							
Percent Solid	86	%	SM2540B	0.10	09/12	09/12	KB

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 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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Client #: CHI-00-030604
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 Stephanie Strothoff

Page: Page 1 of 2
 Date: 09/17/2002
 Log #: L67530-8

Sample Description:

MRC Polymers
 Proj. #: 02448B

Analytical Report: B-9 9-12'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	82	%	SM2540B	0.10	09/12	09/12	KB
Volatiles Organic Compounds							
MEK (2-Butanone)	BDL	ug/kg (dw)	5035/8260	47	09/10	09/16	BL
2-Hexanone	BDL	ug/kg (dw)	5035/8260	47	09/10	09/16	BL
MIBK (4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	47	09/10	09/16	BL
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	1.9	09/10	09/16	BL
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.9	09/10	09/16	BL
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.9	09/10	09/16	BL
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.9	09/10	09/16	BL
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	0.94	09/10	09/16	BL
Acetone	130	ug/kg (dw)	5035/8260	47	09/10	09/16	BL
Benzene	2.7	ug/kg (dw)	5035/8260	1.9	09/10	09/16	BL
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	1.9	09/10	09/16	BL
Bromoform	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Bromomethane	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	470	09/10	09/16	BL
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	47	09/10	09/16	BL
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.9	09/10	09/16	BL
Chloroethane	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Chloroform	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL

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 Date: 09/17/2002
 Log #: L67530-8

Sample Description:

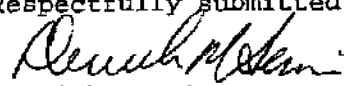
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-9 9-12'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Chloromethane	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	9.4	09/10	09/16	BL
Styrene	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Toluene	5.1	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Trichloroethene	BDL	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	9.4	09/10	09/16	BL
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.8	09/10	09/16	BL
Total Xylenes	6.3	ug/kg (dw)	5035/8260	4.7	09/10	09/16	BL
MTBE	BDL	ug/kg (dw)	5035/8260	47	09/10	09/16	BL
Dilution Factor	0.77		5035/8260		09/10	09/16	BL
Surrogate Recoveries:							
Dibromofluoromethane	99.0	%	5035/8260	52-155	09/10	09/16	BL
Toluene-DB	81.0	%	5035/8260	46-154	09/10	09/16	BL
4-Bromofluorobenzene	71.0	%	5035/8260	36-138	09/10	09/16	BL

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(%) -see attached USB code
 FLDEP Flags: J(%) -estimated 1:success fail 2:no known QC reg. 3:QC fail \$R or \$RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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 Laboratory Director

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 Date: 09/17/2002
 Log #: L67530-9

Sample Description:

MRC Polymers
 Proj. #: 02448B

Analytical Report: B-10 0-3'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	91	%	SM2540B	0.10	09/12	09/12	KB
Volatiles Organic Compounds							
MEK (2-Butanone)	BDL	ug/kg (dw)	5035/8260	51	09/10	09/16	BL
2-Hexanone	BDL	ug/kg (dw)	5035/8260	51	09/10	09/16	BL
MIBK (4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	51	09/10	09/16	BL
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	2.0	09/10	09/16	BL
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	2.0	09/10	09/16	BL
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.0	09/10	09/16	BL
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.0	09/10	09/16	BL
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	1.0	09/10	09/16	BL
Acetone	130	ug/kg (dw)	5035/8260	51	09/10	09/16	BL
Benzene	3.0	ug/kg (dw)	5035/8260	2.0	09/10	09/16	BL
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	2.0	09/10	09/16	BL
Bromoform	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Bromomethane	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	510	09/10	09/16	BL
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	51	09/10	09/16	BL
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	2.0	09/10	09/16	BL
Chloroethane	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Chloroform	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL

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 Date: 09/17/2002
 Log #: L67530-9

Sample Description:

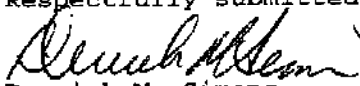
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-10 0-3'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Chloromethane	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	10	09/10	09/16	BL
Styrene	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Tetrachloroethene	160	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Toluene	8.2	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Trichloroethene	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	10	09/10	09/16	BL
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	4.0	09/10	09/16	BL
Total Xylenes	BDL	ug/kg (dw)	5035/8260	5.1	09/10	09/16	BL
MTBE	BDL	ug/kg (dw)	5035/8260	51	09/10	09/16	BL
Dilution Factor	0.92		5035/8260		09/10	09/16	BL
Surrogate Recoveries:							
Dibromofluoromethane	92.0	%	5035/8260	52-155	09/10	09/16	BL
Toluene-D8	71.0	%	5035/8260	46-154	09/10	09/16	BL
4-Bromofluorobenzene	45.0	%	5035/8260	36-138	09/10	09/16	BL

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail *R or *RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOR# E86240 NC CERT# 444
 SUB DOH# 86122, 86109, E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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 Laboratory Director

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 Date: 09/17/2002
 Log #: L67530-10

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-11 3-6'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
BTEX Compounds							
Benzene	BDL	ug/kg (dw)	5035/8260	2.1	09/10	09/16	BL
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	5.4	09/10	09/16	BL
Toluene	BDL	ug/kg (dw)	5035/8260	5.4	09/10	09/16	BL
Total Xylenes	BDL	ug/kg (dw)	5035/8260	5.4	09/10	09/16	BL
Total BTEX	BDL	ug/kg (dw)	5035/8260	5.4	09/10	09/16	BL
Dilution Factor	0.89		5035/8260		09/10	09/16	BL
Surrogate Recoveries:							
Dibromofluoromethane	92.0	%	5035/8260	52-155	09/10	09/16	BL
Toluene-D8	71.0	%	5035/8260	46-154	09/10	09/16	BL
4-Bromofluorobenzene	45.0	%	5035/8260	36-138	09/10	09/16	BL
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Fluoranthene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Pyrene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Benzo (a) anthracene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Benzo (a) pyrene	72	ug/kg (dw)	3550/8270	72	09/15	09/16	KK
Benzo (b) fluoranthene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Benzo (k) fluoranthene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Chrysene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Dibenzo (a, h) Anthracene	BDL	ug/kg (dw)	3550/8270	72	09/15	09/16	KK
Indeno (1,2,3-c,d) pyrene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Benzo (g, h, i) perylene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	400	09/15	09/16	KK
Dilution Factor	1.0		3550/8270		09/15	09/16	KK

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 Date: 09/17/2002
 Log #: L67530-10

Sample Description:


MRC Polymers
 Proj.#: 02448B

Analytical Report: B-11 3-6'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Any. Date	Analyst
Polynuclear Aromatic Hydrocarbons (continued)							
Surrogate Recoveries:							
Nitrobenzene-d5	108	%	3550/8270	15-121	09/15	09/16	KK
2-Fluorobiphenyl	106	%	3550/8270	42-111	09/15	09/16	KK
Terphenyl-d14	120	%	3550/8270	37-143	09/15	09/16	KK
Percent Solids							
Percent Solid	83	%	SM2540B	0.10	09/12	09/12	KB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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Page: Page 1 of 2
 Date: 09/17/2002
 Log #: L67530-11

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-10 6-9'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
BTEX Compounds							
Benzene	BDL	ug/kg (dw)	5035/8260	2.5	09/10	09/16	BL
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	6.2	09/10	09/16	BL
Toluene	BDL	ug/kg (dw)	5035/8260	6.2	09/10	09/16	BL
Total Xylenes	BDL	ug/kg (dw)	5035/8260	6.2	09/10	09/16	BL
Total BTEX	BDL	ug/kg (dw)	5035/8260	6.2	09/10	09/16	BL
Dilution Factor	0.84		5035/8260		09/10	09/16	BL
Surrogate Recoveries:							
Dibromofluoromethane	105	%	5035/8260	52-155	09/10	09/16	BL
Toluene-D8	91.0	%	5035/8260	46-154	09/10	09/16	BL
4-Bromofluorobenzene	64.0	%	5035/8260	36-138	09/10	09/16	BL
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Fluoranthene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Pyrene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Benzo(a)pyrene	BDL	ug/kg (dw)	3550/8270	88	09/15	09/16	KK
Benzo(b)fluoranthene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Chrysene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	88	09/15	09/16	KK
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	490	09/15	09/16	KK
Dilution Factor	1.0		3550/8270		09/15	09/16	KK

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 Date: 09/17/2002
 Log #: L67530-11

Sample Description:

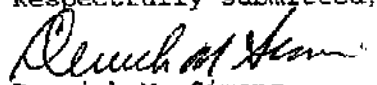
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-10 6-9'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/11/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons (continued)							
Surrogate Recoveries:							
Nitrobenzene-d5	53.0	%	3550/8270	15-121	09/15	09/16	KK
2-Fluorobiphenyl	130	%	3550/8270	42-111	09/15	09/16	KK
Terphenyl-d14	138	%	3550/8270	37-143	09/15	09/16	KK
Percent Solids							
Percent Solid	68	%	SM2540B	0.10	09/12	09/12	KB

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 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86046 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Derrick M. Simons
 Laboratory Director

CHAIN OF CUSTODY RECORD

Log # 67530

Quote:

Samples impact upon arrival? YES NO N/A
Received on wet ice? YES NO N/A
Proper preservation indicated? YES NO N/A
Received within holding time? YES NO N/A
Custody seals intact? YES NO N/A
Volatiles rec'd w/out headspace? YES NO N/A
Proper containers used? YES NO N/A

Company Name **PIONEER** PO# 02448B
Address **700 N. Sacramento Ste. 101**
City **Chicago** State **IL** Zip **60612**
Attn: **Stephanie L. Strothoff** 312-587-8210
Project Name **MRC Polymers** Proj# **02448B**
Sampler Name/Signature **Stephanie L. Strothoff** 312-587-1021

Sample ID	Date	Time	Matrix	Code	Notes
1 B-2 6-9'	9/10/02	AM	S	1:40E 3 VOAS	↓
2 B-3 6-9'				↓	
3 B-4 9-12'				↓	
4 B-5 9-12'				2:40E 3 VOAS	↓
5 B-6 6-9'				1:40E 3 VOAS	↓
6 B-7 6-9'				↓	
7 B-8 9-12'				↓	
8 B-9 9-12'				2:40E 3 VOAS	↓
9 B-10 0-3'				↓	
0 B-11 3-6'				1:40E 3 VOAS	↓

Sample ID	Date	Time	Matrix	Code	Notes
40	9/10/02	2:00pm	Soil	1:40E	↓
40	9/10/02	5:00pm	Soil	1:40E	↓

Sample ID	Date	Time	Matrix	Code	Notes
1 B-2 6-9'	9/10/02	AM	S	1:40E 3 VOAS	↓
2 B-3 6-9'				↓	
3 B-4 9-12'				↓	
4 B-5 9-12'				2:40E 3 VOAS	↓
5 B-6 6-9'				1:40E 3 VOAS	↓
6 B-7 6-9'				↓	
7 B-8 9-12'				↓	
8 B-9 9-12'				2:40E 3 VOAS	↓
9 B-10 0-3'				↓	
0 B-11 3-6'				1:40E 3 VOAS	↓

Matrix Codes
Solid Waste SW
Ground Water GW
Effluent Eff
Aqueous Aqueous
Waste Water WW
Drinking Water DW
Surface Water SU
Other O

Pres./Codes
A. None
B. HNO₃
C. H₂SO₄
D. NaOH
E. HCl
F. MeOH
G. Na₂SO₃
H. NaHSO₄
I. Ice
J. MCAA
O. Other

Sample ID	Date	Time	Matrix	Code	Notes
1 B-2 6-9'	9/10/02	AM	S	1:40E 3 VOAS	↓
2 B-3 6-9'				↓	
3 B-4 9-12'				↓	
4 B-5 9-12'				2:40E 3 VOAS	↓
5 B-6 6-9'				1:40E 3 VOAS	↓
6 B-7 6-9'				↓	
7 B-8 9-12'				↓	
8 B-9 9-12'				2:40E 3 VOAS	↓
9 B-10 0-3'				↓	
0 B-11 3-6'				1:40E 3 VOAS	↓

Remarks
0423V
HOLD
0423V
0423V
0423V
0423V

3231 N.W. 7th Avenue
Boca Raton, FL 33431
888-862-LABS
561-447-7373
888-456-4846 Fax
561-447-6136 Fax
C.O.C. # 43812

ORIGINAL

CHAIN OF CUSTODY RECORD

US BIOSYSTEMS

Log # 67530

Quote:

Samples intact upon arrival?
Received on wet ice? Temp
Proper preservatives indicated?
Received within holding time?
CUSTODY SEALS INTACT?
VOLATILES rec'd W/OUT HEADSPACE?
PROPER CONTAINERS used?

YES NO N/A

Company Name **PIONEER** PO# 02448B
Address 100 N. Sacramento, St. 101
City Chicago State IL Zip 60612
Attn: Stephanie L. Stroffert 312-587-8210
Project Name MRC Polymers Proj# 02448B
Sample Name *Stephanie L. Stroffert* Phone# 312-587-1021

Matrix Code
1 B-10 6-9' 9/10/02 PM S 4 1:402 500AS

1	B-10	6-9'	9/10/02	PM	S	4	1:402	500AS
2								
3								
4								
5								
6								
7								
8								
9								
0								

Matrix Codes

SD Solid Waste OL Oil
GW Ground Water SL Sludge
EFF Effluent SO Soil Sediment
APW Analyte Free H₂O AQ Aqueous
WWW Waste Water NA Non-aqueous
DW Drinking Water PE Petroleum
SU Surface Water O Other
(Please Specify)

Pres/Codes

A. None
B. HNO₃
C. H₂SO₄
D. NaOH
E. HCL
F. MeOH
G. Na₂S₂O₃
H. NaHSO₄
I. ICE
J. MCAA
O. Other

REMARKS

D1123 V

V/N

Date required

Y N

None

1

2

3

Other

Y N

4

Stephanie L. Stroffert

9/11/02

John C. VandeWol

9/11/02

2:00 PM

4

USO CHICAGO - JCV

9/11/02

5:00 PM

FED Ex - JCV

5:00 PM

3231 N.W. 7th Avenue
Boca Raton, FL 33431
888-862-LABS
561-447-7373
888-456-4846 Fax
561-447-6136 Fax

C.O.C. # 43813



Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 2
 Date: 09/23/2002
 Log #: L67652-1

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-12 9-12'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Fluoranthene	700	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Pyrene	790	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Benzo(a)pyrene	380	ug/kg (dw)	3550/8270	71	09/18	09/19	KK
Benzo(b)fluoranthene	480	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Chrysene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	71	09/18	09/19	KK
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Dilution Factor	1.0		3550/8270		09/18	09/19	KK
Surrogate Recoveries:							
Nitrobenzene-d5	60.0	%	3550/8270	15-121	09/18	09/19	KK
2-Fluorobiphenyl	72.0	%	3550/8270	42-111	09/18	09/19	KK
Terphenyl-d14	87.0	%	3550/8270	37-143	09/18	09/19	KK
Percent Solids							
Percent Solid	84	%	SM2540B	0.10	09/16	09/16	CP

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 2 of 2
 Date: 09/23/2002
 Log #: L67652-1

Sample Description:

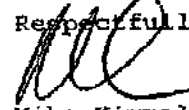
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-12 9-12'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
Percent Solids (continued)						

All analyses were performed using EPA, ASTM, NIOSH, DSGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CPR-Pb/Cu rule; ND-non detect (RL estimated); NPL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; O-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980226 DOB# B86240 NC CERT# 444
 SUB DOB# 86122,86109,B86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 DSACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 3
 Date: 09/23/2002
 Log #: L67652-2

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-13 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Fluoranthene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Pyrene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Benzo (a) anthracene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Benzo (a) pyrene	BDL	ug/kg (dw)	3550/8270	74	09/18	09/19	KK
Benzo (b) fluoranthene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Benzo (k) fluoranthene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Chrysene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Dibenzo (a, h) Anthracene	BDL	ug/kg (dw)	3550/8270	74	09/18	09/19	KK
Indeno (1, 2, 3-c, d) pyrene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Benzo (g, h, i) perylene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Dilution Factor	1.0		3550/8270		09/18	09/19	KK
Surrogate Recoveries:							
Nitrobenzene-d5	52.0	%	3550/8270	15-121	09/18	09/19	KK
2-Fluorobiphenyl	89.0	%	3550/8270	42-111	09/18	09/19	KK
Terphenyl-d14	128	%	3550/8270	37-143	09/18	09/19	KK
Metals							
Arsenic	7200	ug/kg (dw)	3050/6010	620	09/17	09/18	SB
Barium	27000	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB
Cadmium	BDL	ug/kg (dw)	3050/6010	12000	09/17	09/19	SB
Chromium	7400	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB
Lead	16000	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB
Selenium	4800	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 2 of 3
 Date: 09/23/2002
 Log #: L67652-2

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-13 6-9'

Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB
Mercury	BDL	ug/kg (dw)	7471	120	09/17	09/17	LL
Percent Solids							
Percent Solid	81	%	SM2540B	0.10	09/16	09/16	CP
Volatile Organic Compounds							
MEK (2-Butanone)	BDL	ug/kg (dw)	5035/8260	50	09/12	09/18	SV
2-Hexanone	BDL	ug/kg (dw)	5035/8260	50	09/12	09/18	SV
MIBK (4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	50	09/12	09/18	SV
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	2.0	09/12	09/18	SV
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	2.0	09/12	09/18	SV
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.0	09/12	09/18	SV
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.0	09/12	09/18	SV
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	1.0	09/12	09/18	SV
Acetone	BDL	ug/kg (dw)	5035/8260	85	09/12	09/18	SV
Benzene	BDL	ug/kg (dw)	5035/8260	2.0	09/12	09/18	SV
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	2.0	09/12	09/18	SV
Bromoform	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Bromomethane	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	500	09/12	09/18	SV
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	50	09/12	09/18	SV
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	2.0	09/12	09/18	SV
Chloroethane	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Chloroform	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Chloromethane	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	1.0	09/12	09/18	SV
Styrene	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 3 of 3
 Date: 09/23/2002
 Log #: L67652-2

Sample Description:


MRC Polymers
 Proj.#: 02448B

Analytical Report: B-13 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Any. Date	Analyst
Volatile Organic Compounds (continued)							
Toluene	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Trichloroethene	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	10	09/12	09/18	SV
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	4.0	09/12	09/18	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	5.0	09/12	09/18	SV
MTBE	BDL	ug/kg (dw)	5035/8260	50	09/12	09/18	SV
Dilution Factor	0.81		5035/8260		09/12	09/18	SV
Surrogate Recoveries:							
Dibromofluoromethane	138	%	5035/8260	52-155	09/12	09/18	SV
Toluene-D8	103	%	5035/8260	46-154	09/12	09/18	SV
4-Bromofluorobenzene	54.0	%	5035/8260	36-138	09/12	09/18	SV

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,886048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 3
 Date: 09/23/2002
 Log #: L67652-3

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-15 0-3'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	530	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Acenaphthene	1500	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Anthracene	4700	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Fluoranthene	19000	ug/kg (dw)	3550/8270	4100	09/18	09/19	KK
Fluorene	1500	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Pyrene	17000	ug/kg (dw)	3550/8270	4100	09/18	09/19	KK
Benzo(a)anthracene	8900	ug/kg (dw)	3550/8270	4100	09/18	09/19	KK
Benzo(a)pyrene	7300	ug/kg (dw)	3550/8270	740	09/18	09/19	KK
Benzo(b)fluoranthene	10000	ug/kg (dw)	3550/8270	4100	09/18	09/19	KK
Benzo(k)fluoranthene	3700	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Chrysene	7800	ug/kg (dw)	3550/8270	4100	09/18	09/19	KK
Dibenzo(a,h)Anthracene	1400	ug/kg (dw)	3550/8270	74	09/18	09/19	KK
Indeno(1,2,3-c,d)pyrene	4100	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Acenaphthylene	460	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Benzo(g,h,i)perylene	4200	ug/kg (dw)	3550/8270	410	09/18	09/19	KK
Phenanthrene	16000	ug/kg (dw)	3550/8270	4100	09/18	09/19	KK
Dilution Factor	1.0		3550/8270		09/18	09/19	KK
Surrogate Recoveries:							
Nitrobenzene-d5	42.0	%	3550/8270	15-121	09/18	09/19	KK
2-Fluorobiphenyl	64.0	%	3550/8270	42-111	09/18	09/19	KK
Terphenyl-d14	60.0	%	3550/8270	37-143	09/18	09/19	KK
Metals							
Arsenic	27000	ug/kg (dw)	3050/6010	620	09/17	09/18	SB
Barium	480000	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB
Cadmium	BDL	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB
Chromium	30000	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB
Lead	1500000	ug/kg (dw)	3050/6010	12000	09/17	09/19	SB
Selenium	6700	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Suite 100
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 Date: 09/23/2002
 Log #: L67652-3

Sample Description:

MRC Polymers
 Proj. #: 02448B

Analytical Report: B-15 0-3'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	2300	ug/kg (dw)	3050/6010	1200	09/17	09/18	SB
Mercury	1100	ug/kg (dw)	7471	740	09/17	09/17	LL
Percent Solids							
Percent Solid	81	%	SM2540B	0.10	09/16	09/16	CP
Volatile Organic Compounds							
MEK(2-Butanone)	BDL	ug/kg (dw)	5035/8260	68	09/12	09/18	SV
2-Hexanone	BDL	ug/kg (dw)	5035/8260	68	09/12	09/18	SV
MIBK(4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	68	09/12	09/18	SV
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	2.7	09/12	09/18	SV
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	2.7	09/12	09/18	SV
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.7	09/12	09/18	SV
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.7	09/12	09/18	SV
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	1.4	09/12	09/18	SV
Acetone	BDL	ug/kg (dw)	5035/8260	68	09/12	09/18	SV
Benzene	BDL	ug/kg (dw)	5035/8260	2.7	09/12	09/18	SV
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	2.7	09/12	09/18	SV
Bromoform	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Bromomethane	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	680	09/12	09/18	SV
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	68	09/12	09/18	SV
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	2.7	09/12	09/18	SV
Chloroethane	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Chloroform	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Chloromethane	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	14	09/12	09/18	SV
Styrene	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV

Client #: CHI-00-030604
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 Date: 09/23/2002
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Sample Description:

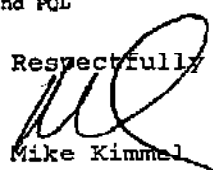
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-15 0-3'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Toluene	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Trichloroethene	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	14	09/12	09/18	SV
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/18	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	6.8	09/12	09/18	SV
MTBE	BDL	ug/kg (dw)	5035/8260	68	09/12	09/18	SV
Dilution Factor	1.1		5035/8260		09/12	09/18	SV
Surrogate Recoveries:							
Dibromofluoromethane	107	%	5035/8260	52-155	09/12	09/18	SV
Toluene-D8	71.0	%	5035/8260	46-154	09/12	09/18	SV
4-Bromofluorobenzene	23.0 MI	%	5035/8260	36-138	09/12	09/18	SV

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980136 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
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 Chicago, IL 60612
 Stephanie Strothoff

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 Date: 09/23/2002
 Log #: L67652-4

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-16 0-3'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Anthracene	610	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Fluoranthene	2400	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Pyrene	1800	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Benzo(a)anthracene	1100	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Benzo(a)pyrene	870	ug/kg (dw)	3550/8270	69	09/18	09/19	KK
Benzo(b)fluoranthene	1100	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Chrysene	1000	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	69	09/18	09/19	KK
Indeno(1,2,3-c,d)pyrene	400	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Benzo(g,h,i)perylene	460	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Phenanthrene	2100	ug/kg (dw)	3550/8270	380	09/18	09/19	KK
Dilution Factor	1.0		3550/8270		09/18	09/19	KK
Surrogate Recoveries:							
Nitrobenzene-d5	50.0	%	3550/8270	15-121	09/18	09/19	KK
2-Fluorobiphenyl	59.0	%	3550/8270	42-111	09/18	09/19	KK
Terphenyl-d14	57.0	%	3550/8270	37-143	09/18	09/19	KK
Metals							
Arsenic	10000	ug/kg (dw)	3050/6010	570	09/17	09/18	SB
Barium	160000	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Cadmium	1500	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Chromium	18000	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Lead	450000	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Selenium	2600	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB

Client #: CHI-00-030604
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 Date: 09/23/2002
 Log #: L67652-4

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-16 0-3'

Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Mercury	380	ug/kg (dw)	7471	230	09/17	09/17	LL
Percent Solids							
Percent Solid	87	%	SM2540B	0.10	09/16	09/16	CP
Volatile Organic Compounds							
MEK(2-Butanone)	BDL	ug/kg (dw)	5035/8260	57	09/12	09/18	SV
2-Hexanone	BDL	ug/kg (dw)	5035/8260	57	09/12	09/18	SV
MIBK(4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	57	09/12	09/18	SV
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	2.3	09/12	09/18	SV
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	2.3	09/12	09/18	SV
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.3	09/12	09/18	SV
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.3	09/12	09/18	SV
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	1.1	09/12	09/18	SV
Acetone	BDL	ug/kg (dw)	5035/8260	57	09/12	09/18	SV
Benzene	BDL	ug/kg (dw)	5035/8260	2.3	09/12	09/18	SV
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	2.3	09/12	09/18	SV
Bromoform	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Bromomethane	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	570	09/12	09/18	SV
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	57	09/12	09/18	SV
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	2.3	09/12	09/18	SV
Chloroethane	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Chloroform	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Chloromethane	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	11	09/12	09/18	SV
Styrene	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV

Client #: CHI-00-030604
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 Date: 09/23/2002
 Log #: L67652-4

Sample Description:

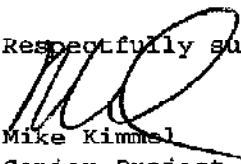
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-16 0-3'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Toluene	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Trichloroethene	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	11	09/12	09/18	SV
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/18	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	5.7	09/12	09/18	SV
MTBE	BDL	ug/kg (dw)	5035/8260	57	09/12	09/18	SV
Dilution Factor	1.0		5035/8260		09/12	09/18	SV
Surrogate Recoveries:							
Dibromofluoromethane	93.0	%	5035/8260	52-155	09/12	09/18	SV
Toluene-D8	58.0	%	5035/8260	46-154	09/12	09/18	SV
4-Bromofluorobenzene	17.0 MI	%	5035/8260	36-138	09/12	09/18	SV

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NPL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 1R or 1RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 3
 Date: 09/23/2002
 Log #: L67652-5

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-17 0-3'

Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Fluoranthene	1100	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Pyrene	660	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Benzo (a) anthracene	BDL	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Benzo (a) pyrene	380	ug/kg (dw)	3550/8270	67	09/18	09/19	KK
Benzo (b) fluoranthene	500	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Benzo (k) fluoranthene	BDL	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Chrysene	390	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Dibenzo (a, h) Anthracene	BDL	ug/kg (dw)	3550/8270	67	09/18	09/19	KK
Indeno (1, 2, 3-c, d) pyrene	BDL	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Benzo (g, h, i) perylene	BDL	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Phenanthrene	760	ug/kg (dw)	3550/8270	370	09/18	09/19	KK
Dilution Factor	1.0		3550/8270		09/18	09/19	KK
Surrogate Recoveries:							
Nitrobenzene-d5	36.0	%	3550/8270	15-121	09/18	09/19	KK
2-Fluorobiphenyl	56.0	%	3550/8270	42-111	09/18	09/19	KK
Terphenyl-d14	64.0	%	3550/8270	37-143	09/18	09/19	KK
Metals							
Arsenic	8000	ug/kg (dw)	3050/6010	560	09/17	09/18	SB
Barium	88000	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Cadmium	1400	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Chromium	180000	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Lead	210000	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Selenium	BDL	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Date: 09/23/2002
 Log #: L67652-5

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-17 0-3'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1100	09/17	09/18	SB
Mercury	110	mg/kg (dw)	7471	110	09/17	09/17	LL
Percent Solids							
Percent Solid	90	%	SM2540B	0.10	09/16	09/16	CP
Volatiles Organic Compounds							
MEK(2-Butanone)	BDL	ug/kg (dw)	5035/8260	37	09/12	09/18	SV
2-Hexanone	BDL	ug/kg (dw)	5035/8260	37	09/12	09/18	SV
MIBK(4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	37	09/12	09/18	SV
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	1.5	09/12	09/18	SV
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.5	09/12	09/18	SV
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	09/12	09/18	SV
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	09/12	09/18	SV
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	0.73	09/12	09/18	SV
Acetone	BDL	ug/kg (dw)	5035/8260	37	09/12	09/18	SV
Benzene	BDL	ug/kg (dw)	5035/8260	1.5	09/12	09/18	SV
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	1.5	09/12	09/18	SV
Bromoform	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Bromomethane	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	370	09/12	09/18	SV
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	37	09/12	09/18	SV
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.5	09/12	09/18	SV
Chloroethane	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Chloroform	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Chloromethane	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	7.3	09/12	09/18	SV
Styrene	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV

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 Date: 09/23/2002
 Log #: L67652-5

Sample Description:

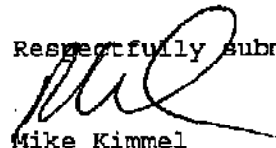
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-17 0-3'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatile Organic Compounds (continued)							
Toluene	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Trichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	7.3	09/12	09/18	SV
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	2.9	09/12	09/18	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/18	SV
MTBE	BDL	ug/kg (dw)	5035/8260	37	09/12	09/18	SV
Dilution Factor	0.66		5035/8260		09/12	09/18	SV
Surrogate Recoveries:							
Dibromofluoromethane	65.0	%	5035/8260	52-155	09/12	09/18	SV
Toluene-D8	36.0 MI	%	5035/8260	46-154	09/12	09/18	SV
4-Bromofluorobenzene	12.0 MI	%	5035/8260	36-138	09/12	09/18	SV

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# D0395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Stephanie Strothoff

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 Date: 09/23/2002
 Log #: L67652-6

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-17 9-12'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Fluoranthene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Pyrene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Benzo(a)pyrene	BDL	ug/kg (dw)	3550/8270	71	09/18	09/19	KK
Benzo(b)fluoranthene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Chrysene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	71	09/18	09/19	KK
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	390	09/18	09/19	KK
Dilution Factor	1.0		3550/8270		09/18	09/19	KK
Surrogate Recoveries:							
Nitrobenzene-d5	58.0	%	3550/8270	15-121	09/18	09/19	KK
2-Fluorobiphenyl	76.0	%	3550/8270	42-111	09/18	09/19	KK
Terphenyl-d14	96.0	%	3550/8270	37-143	09/18	09/19	KK
Percent Solids							
Percent Solid	84	%	SM2540B	0.10	09/16	09/16	CP
Volatile Organic Compounds							
MEK(2-Butanone)	BDL	ug/kg (dw)	5035/8260	54	09/12	09/19	SV
2-Hexanone	BDL	ug/kg (dw)	5035/8260	54	09/12	09/19	SV
MIBK(4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	54	09/12	09/19	SV

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 Date: 09/23/2002
 Log #: L67652-6

Sample Description:

MRC Polymers
 Proj. #: 02448B

Analytical Report: B-17 9-12'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatile Organic Compounds (continued)							
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	2.2	09/12	09/19	SV
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	2.2	09/12	09/19	SV
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.2	09/12	09/19	SV
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	2.2	09/12	09/19	SV
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	1.1	09/12	09/19	SV
Acetone	BDL	ug/kg (dw)	5035/8260	84	09/12	09/19	SV
Benzene	BDL	ug/kg (dw)	5035/8260	2.2	09/12	09/19	SV
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	2.2	09/12	09/19	SV
Bromoform	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Bromomethane	BDL	ug/kg (dw)	5035/8260	7.1	09/12	09/19	SV
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	540	09/12	09/19	SV
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	54	09/12	09/19	SV
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	2.2	09/12	09/19	SV
Chloroethane	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Chloroform	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Chloromethane	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	11	09/12	09/19	SV
Styrene	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Toluene	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Trichloroethene	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	11	09/12	09/19	SV
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	4.3	09/12	09/19	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	5.4	09/12	09/19	SV
MTBE	BDL	ug/kg (dw)	5035/8260	54	09/12	09/19	SV
Dilution Factor	0.91		5035/8260		09/12	09/19	SV
Surrogate Recoveries:							
Dibromofluoromethane	114	%	5035/8260	52-155	09/12	09/19	SV

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 Log #: L67652-6

Sample Description:

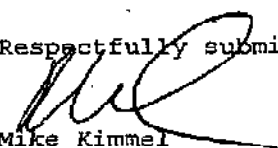
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-17 9-12'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Toluene-D8	75.0	%	5035/8260	46-154	09/12	09/19	SV
4-Bromofluorobenzene	21.0 MI	%	5035/8260	36-138	09/12	09/19	SV

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect(RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126	DOH# B86240	NC CERT# 444
SUB DOH# 86122,86109,886048	ADEM ID# 40850	IL CERT# 200020
SC CERT# 96031001	TN CERT# 02985	
USACE	GA CERT# 917	
VA CERT# 00395	USDA Soil Permit# S-35240	

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

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 Address: Pioneer Environmental
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 Date: 09/23/2002
 Log #: L67652-7

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-18 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Fluoranthene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Pyrene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Benzo (a) anthracene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Benzo (a) pyrene	BDL	ug/kg (dw)	3550/8270	78	09/18	09/19	KK
Benzo (b) fluoranthene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Benzo (k) fluoranthene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Chrysene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Dibenzo (a, h) Anthracene	BDL	ug/kg (dw)	3550/8270	78	09/18	09/19	KK
Indeno (1, 2, 3-c, d) pyrene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Benzo (g, h, i) perylene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	430	09/18	09/19	KK
Dilution Factor	1.0		3550/8270		09/18	09/19	KK
Surrogate Recoveries:							
Nitrobenzene-d5	75.0	%	3550/8270	15-121	09/18	09/19	KK
2-Fluorobiphenyl	82.0	%	3550/8270	42-111	09/18	09/19	KK
Terphenyl-d14	117	%	3550/8270	37-143	09/18	09/19	KK
Percent Solids							
Percent Solid	77	%	SM2540B	0.10	09/16	09/16	CP
Volatile Organic Compounds							
MEK (2-Butanone)	BDL	ug/kg (dw)	5035/8260	48	09/12	09/19	SV
2-Hexanone	BDL	ug/kg (dw)	5035/8260	48	09/12	09/19	SV
MIBK (4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	48	09/12	09/19	SV

Client #: CHI-00-030604
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Date: 09/23/2002
Log #: L67652-7

Sample Description:

MRC Polymers
Proj.#: 02448B

Analytical Report: B-18 6-9'
Date Sampled: 09/12/2002
Time Sampled: 00:00
Date Received: 09/13/2002
Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatile Organic Compounds (continued)							
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	1.9	09/12	09/19	SV
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.9	09/12	09/19	SV
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.9	09/12	09/19	SV
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.9	09/12	09/19	SV
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	0.96	09/12	09/19	SV
Acetone	BDL	ug/kg (dw)	5035/8260	110	09/12	09/19	SV
Benzene	BDL	ug/kg (dw)	5035/8260	1.9	09/12	09/19	SV
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	1.9	09/12	09/19	SV
Bromoform	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Bromomethane	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	480	09/12	09/19	SV
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	48	09/12	09/19	SV
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.9	09/12	09/19	SV
Chloroethane	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Chloroform	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Chloromethane	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	9.6	09/12	09/19	SV
Styrene	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Toluene	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Trichloroethene	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	9.6	09/12	09/19	SV
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.8	09/12	09/19	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	4.8	09/12	09/19	SV
MTBE	BDL	ug/kg (dw)	5035/8260	48	09/12	09/19	SV
Dilution Factor	0.74		5035/8260		09/12	09/19	SV
Surrogate Recoveries:							
Dibromofluoromethane	131	%	5035/8260	52-155	09/12	09/19	SV

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Suite 100
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 Date: 09/23/2002
 Log #: L67652-7

Sample Description:

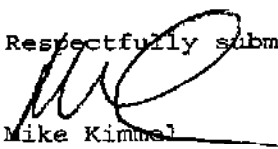
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-18 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatile Organic Compounds (continued)							
Toluene-D8	84.0	%	5035/8260	46-154	09/12	09/19	SV
4-Bromofluorobenzene	29.0 MI	%	5035/8260	36-138	09/12	09/19	SV

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; E-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 4
 Date: 09/23/2002
 Log #: L67652-8

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-20 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Semivolatile Organic Compounds							
2,4,5-Trichlorophenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2,4,6-Trichlorophenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2,4-Dichlorophenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2,4-Dimethylphenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2,4-Dinitrophenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2-Chlorophenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
4,6-Dinitro-2-Methylphenol	BDL	ug/kg (dw)	3550/8270	2300	09/16	09/17	KK
2-Methylphenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2-Nitrophenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
4-Chloro-3-Methylphenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
3&4-Methylphenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
4-Nitrophenol	BDL	ug/kg (dw)	3550/8270	2300	09/16	09/17	KK
Benzoic Acid	BDL	ug/kg (dw)	3550/8270	2300	09/16	09/17	KK
Pentachlorophenol	BDL	ug/kg (dw)	3550/8270	2300	09/16	09/17	KK
Phenol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
1,2,4-Trichlorobenzene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
1,2-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
1,3-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
1,4-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2,4-Dinitrotoluene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2,6-Dinitrotoluene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2-Chloronaphthalene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2-Methylnaphthalene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
2-Nitroaniline	BDL	ug/kg (dw)	3550/8270	2300	09/16	09/17	KK
3,3'-Dichlorobenzidine	BDL	ug/kg (dw)	3550/8270	920	09/16	09/17	KK
3-Nitroaniline	BDL	ug/kg (dw)	3550/8270	2300	09/16	09/17	KK
4-Bromophenyl-phenylether	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
4-Chloroaniline	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
4-Chlorophenyl-phenylether	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK

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 Date: 09/23/2002
 Log #: L67652-8

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-20 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Semivolatile Organic Compounds (continued)							
4-Nitroaniline	BDL	ug/kg (dw)	3550/8270	2300	09/16	09/17	KK
Bis(2-Chloroethoxy)methane	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Bis(2-Chloroethyl) Ether	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Bis(2-Ethylhexyl)Phthalate	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Butylbenzylphthalate	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Carbazole	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Di-N-Butylphthalate	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Di-N-Octylphthalate	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Dibenzofuran	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Diethylphthalate	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Dimethylphthalate	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Hexachlorobenzene	BDL	ug/kg (dw)	3550/8270	140	09/16	09/17	KK
Hexachlorobutadiene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Hexachlorocyclopentadiene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Hexachloroethane	BDL	ug/kg (dw)	3550/8270	140	09/16	09/17	KK
Isophorone	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
N-Nitrosodi-n-propylamine	BDL	ug/kg (dw)	3550/8270	82	09/16	09/17	KK
N-Nitrosodiphenylamine	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Nitrobenzene	BDL	ug/kg (dw)	3550/8270	140	09/16	09/17	KK
N-Nitrosodimethylamine	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Aniline	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Benzyl Alcohol	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Bis(2-Chloroisopropyl) Ether	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Naphthalene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
1-Methylnaphthalene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
1,2-Diphenylhydrazine	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Fluoranthene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Benzidine	BDL	ug/kg (dw)	3550/8270	3700	09/16	09/17	KK
Pyrene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Benzo[a]anthracene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Chrysene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Benzo[b]fluoranthene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Benzo[k]fluoranthene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Benzo[a]pyrene	BDL	ug/kg (dw)	3550/8270	82	09/16	09/17	KK
Indeno[1,2,3-cd]pyrene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Dibenzo[a,h]Anthracene	BDL	ug/kg (dw)	3550/8270	82	09/16	09/17	KK

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Page: Page 3 of 4
 Date: 09/23/2002
 Log #: L67652-8

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-20 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Semivolatile Organic Compounds (continued)							
Benzo[g,h,i]perylene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	450	09/16	09/17	KK
Dilution Factor	1.0		3550/8270		09/16	09/17	KK
Surrogate Recoveries:							
2-Fluorophenol	79.0	%	3550/8270	29-109	09/16	09/17	KK
Phenol-d5	70.0	%	3550/8270	30-109	09/16	09/17	KK
Nitrobenzene-d5	93.0	%	3550/8270	15-121	09/16	09/17	KK
2-Fluorobiphenyl	114	%	3550/8270	42-111	09/16	09/17	KK
2,4,6-Tribromophenol	85.0	%	3550/8270	47-124	09/16	09/17	KK
Terphenyl-d14	102	%	3550/8270	37-143	09/16	09/17	KK
Percent Solids							
Percent Solid	73	%	SM2540B	0.10	09/16	09/16	CP
Volatile Organic Compounds							
MEK (2-Butanone)	BDL	ug/kg (dw)	5035/8260	46	09/12	09/19	SV
2-Hexanone	BDL	ug/kg (dw)	5035/8260	46	09/12	09/19	SV
MIBK (4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	46	09/12	09/19	SV
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	1.8	09/12	09/19	SV
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.8	09/12	09/19	SV
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.8	09/12	09/19	SV
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.8	09/12	09/19	SV
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	0.92	09/12	09/19	SV
Acetone	BDL	ug/kg (dw)	5035/8260	86	09/12	09/19	SV
Benzene	BDL	ug/kg (dw)	5035/8260	1.8	09/12	09/19	SV
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	1.8	09/12	09/19	SV
Bromoform	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Bromomethane	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	460	09/12	09/19	SV
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	46	09/12	09/19	SV
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Date: 09/23/2002
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Sample Description:

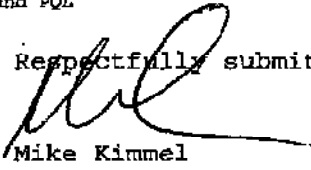
MRC Polymers
 Proj. #: 02448B

Analytical Report: B-20 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Data	Anly. Date	Analyst
Volatiles-Organic Compounds (continued)							
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.8	09/12	09/19	SV
Chloroethane	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Chloroform	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Chloromethane	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	9.2	09/12	09/19	SV
Styrene	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Toluene	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Trichloroethene	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	9.2	09/12	09/19	SV
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.7	09/12	09/19	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	4.6	09/12	09/19	SV
MTBE	BDL	ug/kg (dw)	5035/8260	46	09/12	09/19	SV
Dilution Factor	0.67		5035/8260		09/12	09/19	SV
Surrogate Recoveries:							
Dibromofluoromethane	80.0	%	5035/8260	52-155	09/12	09/19	SV
Toluene-D8	74.0	%	5035/8260	46-154	09/12	09/19	SV
4-Bromofluorobenzene	44.0	%	5035/8260	36-138	09/12	09/19	SV

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# B86240 NC CERT# 444
 SUB DOH# 86122,86109,B86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Stephanie Strothoff

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 Date: 09/23/2002
 Log #: L67652-9

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-21 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Anthracene	550	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Fluoranthene	3600	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Pyrene	3000	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Benzo (a) anthracene	1200	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Benzo (a) pyrene	1100	ug/kg (dw)	3550/8270	91	09/18	09/20	KK
Benzo (b) fluoranthene	1400	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Benzo (k) fluoranthene	550	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Chrysene	1100	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Dibenzo (a, h) Anthracene	150	ug/kg (dw)	3550/8270	91	09/18	09/20	KK
Indeno (1, 2, 3-c, d) pyrene	BDL	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Benzo (g, h, i) perylene	500	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Phenanthrene	2100	ug/kg (dw)	3550/8270	500	09/18	09/20	KK
Dilution Factor	1.0		3550/8270		09/18	09/20	KK
Surrogate Recoveries:							
Nitrobenzene-d5	72.0	%	3550/8270	15-121	09/18	09/20	KK
2-Fluorobiphenyl	81.0	%	3550/8270	42-111	09/18	09/20	KK
Terphenyl-d14	94.0	%	3550/8270	37-143	09/18	09/20	KK
Metals:							
Arsenic	23000	ug/kg (dw)	3050/6010	760	09/17	09/18	SB
Barium	480000	ug/kg (dw)	3050/6010	1500	09/17	09/18	SB
Cadmium	BDL	ug/kg (dw)	3050/6010	1500	09/17	09/18	SB
Chromium	23000	ug/kg (dw)	3050/6010	1500	09/17	09/18	SB
Lead	710000	ug/kg (dw)	3050/6010	1500	09/17	09/18	SB
Selenium	6700	ug/kg (dw)	3050/6010	1500	09/17	09/18	SB

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Sample Description:

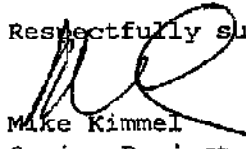
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-21 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1500	09/17	09/18	SB
Mercury	430	ug/kg (dw)	7471	300	09/17	09/17	LL
Percent Solids							
Percent Solid	66	%	SM2540B	0.10	09/16	09/16	CP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:curr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOR# E66240 NC CERT# 444
 SUB DOR# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
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Page: Page 1 of 3
 Date: 09/23/2002
 Log #: L67652-10

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-22 3-6'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Acenaphthene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Anthracene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Fluoranthene	1200	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Fluorene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Pyrene	970	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Benzo (a) anthracene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Benzo (a) pyrene	520	ug/kg (dw)	3550/8270	95	09/18	09/20	KK
Benzo (b) fluoranthene	650	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Benzo (k) fluoranthene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Chrysene	520	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Dibenzo (a, h) Anthracene	BDL	ug/kg (dw)	3550/8270	95	09/18	09/20	KK
Indeno (1, 2, 3-c, d) pyrene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Benzo (g, h, i) perylene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Phenanthrene	BDL	ug/kg (dw)	3550/8270	520	09/18	09/20	KK
Dilution Factor	1.0		3550/8270		09/18	09/20	KK
Surrogate Recoveries:							
Nitrobenzene-d5	70.0	%	3550/8270	15-121	09/18	09/20	KK
2-Fluorobiphenyl	78.0	%	3550/8270	42-111	09/18	09/20	KK
Terphenyl-d14	93.0	%	3550/8270	37-143	09/18	09/20	KK
Metals							
Arsenic	51000	ug/kg (dw)	3050/6010	790	09/17	09/18	SB
Barium	600000	ug/kg (dw)	3050/6010	1600	09/17	09/18	SB
Cadmium	2700	ug/kg (dw)	3050/6010	1600	09/17	09/18	SB
Chromium	40000	ug/kg (dw)	3050/6010	1600	09/17	09/18	SB
Lead	2100000	ug/kg (dw)	3050/6010	16000	09/17	09/19	SB
Selenium	14000	ug/kg (dw)	3050/6010	1600	09/17	09/18	SB

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 2 of 3
 Date: 09/23/2002
 Log #: L67652-10

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-22 3-6'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	1600	ug/kg (dw)	3050/6010	1600	09/17	09/18	SB
Mercury	23000	mg/kg (dw)	7471	13000	09/17	09/17	LL
General Chemistry							
pH	7.40	pH Units	9045	0.10	09/16	09/16	MA
Persistent Solids							
Percent Solid	63	%	SM2540B	0.10	09/16	09/16	CP
Volatile Organic Compounds							
MEK (2-Butanone)	BDL	ug/kg (dw)	5035/8260	79	09/12	09/19	SV
2-Hexanone	BDL	ug/kg (dw)	5035/8260	79	09/12	09/19	SV
MIBK (4-Methyl-2-Pentanone)	BDL	ug/kg (dw)	5035/8260	79	09/12	09/19	SV
1,1-Dichloroethane	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
1,2-Dibromo-3-Chloropropane	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
1,2-Dibromoethane	BDL	ug/kg (dw)	5035/8260	3.2	09/12	09/19	SV
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	3.2	09/12	09/19	SV
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	3.2	09/12	09/19	SV
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	3.2	09/12	09/19	SV
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
1,1,2,2-Tetrachloroethane	BDL	ug/kg (dw)	5035/8260	1.6	09/12	09/19	SV
Acetone	BDL	ug/kg (dw)	5035/8260	130	09/12	09/19	SV
Benzene	BDL	ug/kg (dw)	5035/8260	3.2	09/12	09/19	SV
Bromodichloromethane	BDL	ug/kg (dw)	5035/8260	3.2	09/12	09/19	SV
Bromoform	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Bromomethane	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
n-Butyl Alcohol	BDL	ug/kg (dw)	5035/8260	790	09/12	09/19	SV
Carbon Disulfide	BDL	ug/kg (dw)	5035/8260	79	09/12	09/19	SV
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	3.2	09/12	09/19	SV
Chloroethane	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Chloroform	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Chloromethane	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 3 of 3
 Date: 09/23/2002
 Log #: L67652-10

Sample Description:

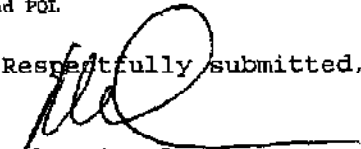
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-22 3-6'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/13/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	16	09/12	09/19	SV
Styrene	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Toluene	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Trichloroethene	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
Vinyl Acetate	BDL	ug/kg (dw)	5035/8260	16	09/12	09/19	SV
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	6.3	09/12	09/19	SV
Total Xylenes	BDL	ug/kg (dw)	5035/8260	7.9	09/12	09/19	SV
MTBE	BDL	ug/kg (dw)	5035/8260	79	09/12	09/19	SV
Dilution Factor	1.0		5035/8260		09/12	09/19	SV
Surrogate Recoveries:							
Dibromofluoromethane	79.0	%	5035/8260	52-155	09/12	09/19	SV
Toluene-D8	45.0 MI	%	5035/8260	46-154	09/12	09/19	SV
4-Bromofluorobenzene	13.0 MI	%	5035/8260	36-138	09/12	09/19	SV

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# B86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

CHAIN OF CUSTODY RECORD

Log # 07652

BIOSYSTEMS

Quote:

SHORT LOG

Company Name PIONEER PO# 02448B
Address 200 N. Sacramento Ste. 101
City Chicago State IL Zip 60612
Attn: Stephanie L. Stroff Fax# 312-587-8210
Project Name MRC Polymers Proj# 02448B
Sample ID 32-587-1021

Matrix Codes*

SO	Solid Waste	OL	Oil
GW	Ground Water	SL	Sludge
EFF	Effluent	SO	Soil Sediment
A-W	Analyte Free H ₂ O	AQ	Aqueous
WW	Waste Water	NA	Non-aqueous
DW	Drinking Water	PE	Petroleum
SU	Surface Water	O	Other

(Please Specify)

Pres/Codes

A	None	G	Na ₂ SO ₃
B	HNO ₃	H	NaHSO ₄
C	H ₂ SO ₄	I	ICE
D	NaOH	J	MCAA
E	HCL	O	Other
F	MeOH		

REMARKS

Sample ID	Date	Time	Matrix	Code	Field Filtered (Y/N)	Field Integrity (Y/N)	Lab Analysis	Remarks
1 B-12 9-12'	9/12/02	AM	S	4	3:10AS	1:40Z		0420V
2 B-13 6-9'								
3 B-15 0-3'								
4 B-16 0-3'								
5 B-17 0-3'					3:10AS	2:40Z		0423V
6 B-17 9-12'					3:10AS	1:40Z		0423V
7 B-18 6-9'			PM					
8 B-20 6-9'					3:10AS	2:140Z		0420V
9 B-21 6-9'								
10 B-22 3-6'								

Sample ID	Date	Time	Matrix	Code	Field Filtered (Y/N)	Field Integrity (Y/N)	Lab Analysis	Remarks
11 B-12 9-12'	9/12/02	AM	S	4	3:10AS	1:40Z		0420V
12 B-13 6-9'								
13 B-15 0-3'								
14 B-16 0-3'								
15 B-17 0-3'					3:10AS	2:40Z		0423V
16 B-17 9-12'					3:10AS	1:40Z		0423V
17 B-18 6-9'			PM					
18 B-20 6-9'					3:10AS	2:140Z		0420V
19 B-21 6-9'								
20 B-22 3-6'								

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Boca Raton, FL 33431
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561-447-7373
888-456-4846 Fax
561-447-6136 Fax

C.O.C. # 19605



Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 1
 Date: 10/02/2002
 Log #: L68066-1

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-5 9-12'
 Date Sampled: 09/10/2002
 Time Sampled: 00:00
 Date Received: 09/27/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
TCLP Extraction Date						
TCLP Extraction	10/01	date	1311 EXTR			VR
TCLP Metals						
Lead	BDL	ug/l	3010/6010	25	10/02 10/02	SB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Company Name	Pioneer	PO#	
Address	700 N. Sacramento, Sk 101		
City	Chicago	State	IL
		Zip	60612
Attn:	Stephanie Strothoff	Fax#	
Project Name	PILL Polymers	Proj#	67530-4
Sampler			
Name/Signature		Phone#	

Sampled matrix	Coarse matrix	Matrix	Coarse aggregate

-1	B-5	9-12	9/12 AM	50	10402
-2					
-3					
-4					
-5					
-6					
-7					
-8					
-9					
-0					

10	13	Date required	Y	N	None	✓	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
----	----	---------------	---	---	------	---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Cooling #	Room	Refrigerator	Date
_____	Knight Be	9/27/68	

_____	Batters		
# _____			

[illegible]

Level _____ 2 _____ 3 _____ Other _____ Y _____ N _____

Time	Date	Page
1250	9702	(54)

[illegible]

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COC # A7333**

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888-456-4846 Fax
561-447-6136 Fax
C.O.C. # 47333**



Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 1
 Date: 10/02/2002
 Log #: L68067-1

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-15 0-3'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/27/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
TCLP Extraction Date						
TCLP Extraction	09/30	date	1311 EXTR			VR
TCLP Metals						
Lead	7.4	ug/l	3010/6010	5.0	10/01 10/02	SB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: X-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02965
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 1
 Date: 10/02/2002
 Log #: L68067-2

Sample Description:

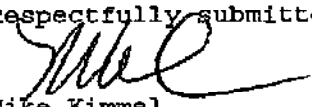
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-21 6-9'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/27/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
TCLP Extraction Date:						
TCLP Extraction	09/30	date	1311 EXTR			VR
TCLP Metals:						
Lead	26	ug/l	3010/6010	5.0	10/01 10/02	SB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86040 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 1
 Date: 10/02/2002
 Log #: L68067-3

Sample Description:

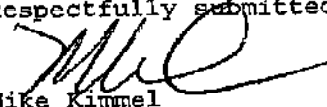
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-22 3-6'
 Date Sampled: 09/12/2002
 Time Sampled: 00:00
 Date Received: 09/27/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Only. Date	Analyst
TCLP Extraction Date TCLP Extraction	09/30	date	1311 EXTR				VR
TCLP Metals Lead	910	ug/l	3010/6010	5.0	10/01	10/02	SB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOM# E86240 NC CERT# 444
 SUB DOM# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 OSACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Company Name						Pioneer	PO#
Address						700 N. Sacramento St, Ste 101	
City				State	Zip	Chicago IL 60612	
Attn:						Stephanie L. Stadlof	
Project Name				MCL Polymers		Proj # 67652391D	
Sampler Name/Signature						Phone#	
Sample ID	Date	Time	Matrix Code	Field Filtered (Y/N)	Integrity OK (Y/N)	Remarks	
-1 B-15	0-3	9/2/02	AM SO				
-2 B-21	6-9		PM				
-3 B-22	3-6						
-4							
-5							
-6							
-7							
-8							
-9							
-0							

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888-456-4846 Fax
561-447-6136 Fax
C.O.C. # 47334

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Boca Raton, FL 33431
888-862-LABS
561-447-7373
888-456-4846 Fax
561-447-6136 Fax
C.O.C. # 47334**



Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 1 of 2
 Date: 10/22/2002
 Log #: L68784-1

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-23 6-9'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Anthracene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Fluoranthene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Pyrene	670	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Benzo(a)pyrene	410	ug/kg (dw)	3550/8270	110	10/17	10/19	LB
Benzo(b)fluoranthene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Chrysene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	110	10/17	10/19	LB
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Phenanthrene	BDL	ug/kg (dw)	3550/8270	610	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	84.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	73.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	69.0	%	3550/8270	37-143	10/17	10/19	LB
Metals:							
Arsenic	11000	ug/kg (dw)	3050/6010	930	10/18	10/18	ZL
Barium	190000	ug/kg (dw)	3050/6010	1900	10/18	10/18	ZL
Cadmium	BDL	ug/kg (dw)	3050/6010	1900	10/18	10/18	ZL
Chromium	16000	ug/kg (dw)	3050/6010	1900	10/18	10/18	ZL
Lead	330000	ug/kg (dw)	3050/6010	1900	10/18	10/18	ZL
Selenium	3100	ug/kg (dw)	3050/6010	1900	10/18	10/18	ZL

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 Date: 10/22/2002
 Log #: L68784-1

Sample Description:


MRC Polymers
 Proj.#: 02448B

Analytical Report: B-23 6-9'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1900	10/18	10/18	ZL
Mercury	1600	ug/kg (dw)	7471	1300	10/18	10/21	LL
General Chemistry							
Organic Content	7.4	%	D2974-87	0.10	10/18	10/18	OC
Percent Ash	93	%	SM2540E	0.10	10/18	10/18	OC
Percent Volatile Solids	7.4	%	SM2540E	0.10	10/18	10/18	OC
pH	7.40	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	54	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 06122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

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 Date: 10/22/2002
 Log #: L68784-2

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-24 6-9'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Anthracene	BDL	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Fluoranthene	940	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Pyrene	970	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Benzo(a)anthracene	560	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Benzo(a)pyrene	730	ug/kg (dw)	3550/8270	77	10/17	10/19	LB
Benzo(b)fluoranthene	820	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Chrysene	590	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Dibenzo(a,h)Anthracene	220	ug/kg (dw)	3550/8270	77	10/17	10/19	LB
Indeno(1,2,3-c,d)pyrene	470	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Benzo(g,h,i)perylene	490	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Phenanthrene	600	ug/kg (dw)	3550/8270	420	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	67.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	58.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	61.0	%	3550/8270	37-143	10/17	10/19	LB
Metals:							
Arsenic	12000	ug/kg (dw)	3050/6010	640	10/18	10/18	ZL
Barium	360000	ug/kg (dw)	3050/6010	1300	10/18	10/18	ZL
Cadmium	BDL	ug/kg (dw)	3050/6010	1300	10/18	10/18	ZL
Chromium	27000	ug/kg (dw)	3050/6010	1300	10/18	10/18	ZL
Lead	600000	ug/kg (dw)	3050/6010	1300	10/18	10/18	ZL
Selenium	5300	ug/kg (dw)	3050/6010	1300	10/18	10/18	ZL

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 Date: 10/22/2002
 Log #: L68784-2

Sample Description:


MRC Polymers
 Proj.#: 02448B

Analytical Report: B-24 6-9'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (Continued)							
Silver	1500	ug/kg (dw)	3050/6010	1300	10/18	10/18	ZL
Mercury	580	ug/kg (dw)	7471	380	10/18	10/21	LL
General Chemistry							
pH	7.58	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	78	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USE code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,866048 ADEM ID# 10850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

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Page: Page 1 of 2
 Date: 10/22/2002
 Log #: L68784-3

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-25 3-6'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluoranthene	550	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Pyrene	440	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)pyrene	360	ug/kg (dw)	3550/8270	64	10/17	10/19	LB
Benzo(b)fluoranthene	550	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Chrysene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	64	10/17	10/19	LB
Indeno(1,2,3-c,d)pyrene	350	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(g,h,i)perylene	390	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Phenanthrene	350	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	62.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	71.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	59.0	%	3550/8270	37-143	10/17	10/19	LB
Metals							
Arsenic	5500	ug/kg (dw)	3050/6010	530	10/18	10/18	ZL
Barium	31000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Cadmium	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Chromium	5600	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Lead	9700	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Selenium	1400	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL

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Sample Description:

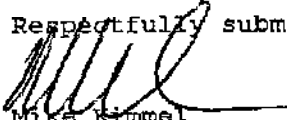
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-25 3-6'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Mercury	BDL	ug/kg (dw)	7471	110	10/18	10/18	LL
General Chemistry							
pH	8.48	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	94	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(8)-see attached USE code
 FLDEP Flags: J(8)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: V-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

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Page: Page 1 of 2
 Date: 10/22/2002
 Log #: L68784-4

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-26 0-3'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluoranthene	1300	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Pyrene	800	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)pyrene	250	ug/kg (dw)	3550/8270	63	10/17	10/19	LB
Benzo(b)fluoranthene	380	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Chrysene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	63	10/17	10/19	LB
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Phenanthrene	1500	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	62.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	71.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	55.0	%	3550/8270	37-143	10/17	10/19	LB
Metals							
Arsenic	3600	ug/kg (dw)	3050/6010	530	10/18	10/18	ZL
Barium	31000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Cadmium	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Chromium	10000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Lead	8300	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Selenium	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL

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 Date: 10/22/2002
 Log #: L68784-4

Sample Description:

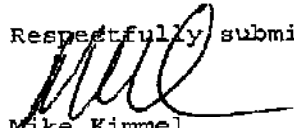
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-26 0-3'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Mercury	BDL	ug/kg (dw)	7471	110	10/18	10/18	LL
General Chemistry							
pH	11.00	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	95	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# B86240 NC CERT# 444
 SUB DOH# 86122,86109,B86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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 Senior Project Manager

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Page: Page 1 of 2
 Date: 10/22/2002
 Log #: L68784-5

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-27 3-6'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Anthracene	380	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Fluoranthene	2300	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Pyrene	2000	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Benzo (a) anthracene	1300	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Benzo (a) pyrene	1400	ug/kg (dw)	3550/8270	68	10/17	10/19	LB
Benzo (b) fluoranthene	1800	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Benzo (k) fluoranthene	660	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Chrysene	1100	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Dibenzo (a, h) Anthracene	330	ug/kg (dw)	3550/8270	68	10/17	10/19	LB
Indeno (1,2,3-c, d) pyrene	940	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Benzo (g, h, i) perylene	1300	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Phenanthrene	1500	ug/kg (dw)	3550/8270	380	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	82.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	81.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	70.0	%	3550/8270	37-143	10/17	10/19	LB
Metals							
Arsenic	6300	ug/kg (dw)	3050/6010	570	10/18	10/18	ZL
Barium	100000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Cadmium	19000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Chromium	9200	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Lead	170000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Selenium	1600	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL

Client #: CHI-00-030604
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 Date: 10/22/2002
 Log #: L68784-5

Sample Description:


MRC Polymers
 Proj.#: 02448B

Analytical Report: B-27 3-6'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Mercury	120	ug/kg (dw)	7471	110	10/18	10/18	LL
General Chemistry							
pH	10.23	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	88	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and POL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
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 Stephanie Strothoff

Page: Page 1 of 2
 Date: 10/22/2002
 Log #: L68784-6

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-28 3-6'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Pyrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)pyrene	250	ug/kg (dw)	3550/8270	63	10/17	10/19	LB
Benzo(b)fluoranthene	370	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Chrysene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	63	10/17	10/19	LB
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Phenanthrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	96.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	90.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	76.0	%	3550/8270	37-143	10/17	10/19	LB
Metals							
Arsenic	4200	ug/kg (dw)	3050/6010	530	10/18	10/18	ZL
Barium	27000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Cadmium	BDL MI	ug/kg (dw)	3050/6010	5300	10/18	10/18	ZL
Chromium	7200	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Lead	9500	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Selenium	3300	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL

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 Date: 10/22/2002
 Log #: L68784-6

Sample Description:


MRC Polymers
 Proj.#: 02448B

Analytical Report: B-28 3-6'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals: (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Mercury	BDL	ug/kg (dw)	7471	110	10/18	10/18	LL
General Chemistry:							
pH	7.73	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	95	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NPL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and POL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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 Senior Project Manager

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Page: Page 1 of 2
 Date: 10/22/2002
 Log #: L68784-7

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-29 3-6'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Anthracene	BDL	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Fluoranthene	2100	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Pyrene	2100	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Benzo(a)anthracene	1200	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Benzo(a)pyrene	1500	ug/kg (dw)	3550/8270	74	10/17	10/19	LB
Benzo(b)fluoranthene	1500	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Benzo(k)fluoranthene	600	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Chrysene	1100	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Dibenzo(a,h)Anthracene	300	ug/kg (dw)	3550/8270	74	10/17	10/19	LB
Indeno(1,2,3-c,d)pyrene	840	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Benzo(g,h,i)perylene	980	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Phenanthrene	1500	ug/kg (dw)	3550/8270	410	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	70.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	67.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	56.0	%	3550/8270	37-143	10/17	10/19	LB
Metals							
Arsenic	11000	ug/kg (dw)	3050/6010	620	10/18	10/18	ZL
Barium	230000	ug/kg (dw)	3050/6010	1200	10/18	10/18	ZL
Cadmium	BDL	ug/kg (dw)	3050/6010	1200	10/18	10/18	ZL
Chromium	23000	ug/kg (dw)	3050/6010	1200	10/18	10/18	ZL
Lead	430000	ug/kg (dw)	3050/6010	1200	10/18	10/18	ZL
Selenium	3000	ug/kg (dw)	3050/6010	1200	10/18	10/18	ZL

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 Date: 10/22/2002
 Log #: L68784-7

Sample Description:


MRC Polymers
 Proj.#: 02448B

Analytical Report: B-29 3-6'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	1500	ug/kg (dw)	3050/6010	1200	10/18	10/18	ZL
Mercury	470	ug/kg (dw)	7471	370	10/18	10/21	LL
General Chemistry							
pH	7.92	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	81	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known OC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# B86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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 Senior Project Manager

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Page: Page 1 of 2
 Date: 10/22/2002
 Log #: L68784-8

Sample Description:

MRC Polymers
 Proj. #: 02448B

Analytical Report: B-30 0-3'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Anthracene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Fluoranthene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Pyrene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Benzo(a)pyrene	160	ug/kg (dw)	3550/8270	61	10/17	10/19	LB
Benzo(b)fluoranthene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Chrysene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Dibenzo(a,h)Anthracene	150	ug/kg (dw)	3550/8270	61	10/17	10/19	LB
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Phenanthrene	BDL	ug/kg (dw)	3550/8270	340	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	82.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	85.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	71.0	%	3550/8270	37-143	10/17	10/19	LB
Metals							
Arsenic	2700	ug/kg (dw)	3050/6010	510	10/18	10/18	ZL
Barium	20000	ug/kg (dw)	3050/6010	1000	10/18	10/18	ZL
Cadmium	BDL	ug/kg (dw)	3050/6010	1000	10/18	10/18	ZL
Chromium	5000	ug/kg (dw)	3050/6010	1000	10/18	10/18	ZL
Lead	9000	ug/kg (dw)	3050/6010	1000	10/18	10/18	ZL
Selenium	1300	ug/kg (dw)	3050/6010	1000	10/18	10/18	ZL

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 Date: 10/22/2002
 Log #: L68784-8

Sample Description:


MRC Polymers
 Proj.#: 02448B

Analytical Report: B-30 0-3'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1000	10/18	10/18	ZL
Mercury	BDL	ug/kg (dw)	7471	100	10/18	10/18	LL
General Chemistry							
pH	7.82	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	98	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail &R or &RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PCL

QAP# 980126 DOR# E86240 NC CERT# 444
 SUB DOR# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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 Senior Project Manager

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Page: Page 1 of 2
 Date: 10/22/2002
 Log #: L68784-9

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-31 0-3'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Pyrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)pyrene	BDL	ug/kg (dw)	3550/8270	65	10/17	10/19	LB
Benzo(b)fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Chrysene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	65	10/17	10/19	LB
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Phenanthrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	52.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	93.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	80.0	%	3550/8270	37-143	10/17	10/19	LB
Metals							
Arsenic	7100	ug/kg (dw)	3050/6010	540	10/18	10/18	ZL
Barium	73000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Cadmium	BDL MI	ug/kg (dw)	3050/6010	5400	10/18	10/18	ZL
Chromium	31000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Lead	7000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Selenium	2300	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL

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Page: Page 2 of 2
 Date: 10/22/2002
 Log #: L68784-9

Sample Description:

MRC Polymers
 Proj.#: 02448B

Analytical Report: B-31 0-3'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Mercury	BDL	ug/kg (dw)	7471	110	10/18	10/18	LL
General Chemistry							
pH	8.12	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	93	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 960126 DOR# E86240 NC CERT# 444
 SUB DON# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

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 Senior Project Manager

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Page: Page 1 of 2
 Date: 10/22/2002
 Log #: L68784-10

Sample Description:

MRC Polymers
 Proj. #: 02448B

Analytical Report: B-32 0-3'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Polynuclear Aromatic Hydrocarbons							
Naphthalene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Fluorene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Pyrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)anthracene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(a)pyrene	BDL	ug/kg (dw)	3550/8270	65	10/17	10/19	LB
Benzo(b)fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(k)fluoranthene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Chrysene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dibenzo(a,h)Anthracene	BDL	ug/kg (dw)	3550/8270	65	10/17	10/19	LB
Indeno(1,2,3-c,d)pyrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Benzo(g,h,i)perylene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Phenanthrene	BDL	ug/kg (dw)	3550/8270	350	10/17	10/19	LB
Dilution Factor	1.0		3550/8270		10/17	10/19	LB
Surrogate Recoveries:							
Nitrobenzene-d5	81.0	%	3550/8270	15-121	10/17	10/19	LB
2-Fluorobiphenyl	80.0	%	3550/8270	42-111	10/17	10/19	LB
Terphenyl-d14	73.0	%	3550/8270	37-143	10/17	10/19	LB
Metals							
Arsenic	5300	ug/kg (dw)	3050/6010	540	10/18	10/18	ZL
Barium	48000	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Cadmium	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Chromium	9500	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Lead	7600	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Selenium	1400	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Stephanie Strothoff

Page: Page 2 of 2
 Date: 10/22/2002
 Log #: L68784-10

Sample Description:

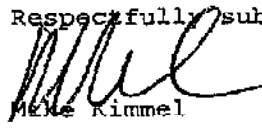
MRC Polymers
 Proj.#: 02448B

Analytical Report: B-32 0-3'
 Date Sampled: 10/15/2002
 Time Sampled: 00:00
 Date Received: 10/16/2002
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Any. Date	Analyst
Metals (continued)							
Silver	BDL	ug/kg (dw)	3050/6010	1100	10/18	10/18	ZL
Mercury	BDL	ug/kg (dw)	7471	110	10/18	10/18	IL
General Chemistry							
pH	10.08	pH Units	9045	0.10	10/17	10/17	IG
Percent Solids							
Percent Solid	93	%	SM2540B	0.10	10/17	10/17	EP

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USE code
 FLDEF Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEF Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEF Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# 886240 NC CERT# 444
 SUB DOH# 86122,86109,886048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

CHAIN OF CUSTODY RECORD

USBIOSYSTEMS

Log #

08784/TN10

Quote:

Company Name PIONEER PO# 02448B
Address 700 N. Sacramento, Ste. 101
City Chicago State IL Zip 60612
Attn: Stephanie L-Spotthoff 312-587-8210
Project Name MRP Polymers Proj# 02448B
Sample Name Chlorinated Polyethylene Proj# 312-587-102

Sample ID	Date	Time	Matrix	Code
1	B-23	4-09	10/5/02	AM S 2 402
2	B-24	6-09		
3	B-25	3-06		
4	B-26	0-3		
5	B-27	3-06		
6	B-28	3-06		
7	B-29	3-06		PM
8	B-30	0-3		
9	B-31	0-3		
10	B-32	0-3		

Date required	None	1	2	3	Other
20	Supreme Street	10/10/02	12 N	Robert C. Vanderhel	12/16/02
20	USB Chicago JCV	10/10/02	5:00pm	FeedEx - JCV	12/16/02
				Chadman	10/10/02

Sample intact upon arrival?
Received on time?
Proper preservation indicated?
Received within holding time?
Custody seals intact?
Volatiles rec'd without headspace?
Proper containers used?

Matrix Codes:
OL Solid Waste
SL Shale
SO Soil Sediment
AQ Aqueous
NA Nonaqueous
FE Petroleum
O Other

Pres/Code:
A. None
B. HNO₃
C. H₂SO₄
D. NaOH
E. HCl
F. MeOH
G. Na₂SO₃
H. NaHSO₄
I. KCl
J. MCAA
O. Other

REMARKS

3231 N.W. 7th Avenue
Boca Raton, FL 33431
888-862-LABS
561-447-7373
888-456-4846 Fax
561-447-6136 Fax
C.O.C. # 44323



Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Joe Kelly

Page: Page 1 of 3
 Date: 01/08/2004
 Log #: L85267-1

Sample Description:

MRC
 Proj. #: 02448B

Analytical Report: N-NW
 Date Sampled: 12/30/2003
 Time Sampled: 10:15
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	87	%	SM2540B	0.10	01/02	01/02	KB
Volatile Organic Compounds							
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Benzene	3.7	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
Bromoform	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
Chloroform	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	7.5	12/30	01/02	JA
Styrene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Toluene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Trichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.0	12/30	01/02	JA
Total Xylenes	4.8	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Dilution Factor	0.65		5035/8260		12/30	01/02	JA
Surrogate Recoveries:							
Dibromofluoromethane	101	%	5035/8260	52-155	12/30	01/02	JA

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Joe Kelly

Page: Page 2 of 3
 Date: 01/08/2004
 Log #: L85267-1

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-NW
 Date Sampled: 12/30/2003
 Time Sampled: 10:15
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatile Organic Compounds (continued)							
Toluene-D8	81	%	5035/8260	46-154	12/30	01/02	JA
4-Bromofluorobenzene	58	%	5035/8260	36-138	12/30	01/02	JA
Base Neutral Compounds							
Bis(2-Chloroethyl) Ether	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,4-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,2-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
N-Nitrosodi-n-propylamine	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,2,4-Trichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Naphthalene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Hexachlorocyclopentadiene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Acenaphthene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Fluorene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
N-Nitrosodiphenylamine	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Hexachlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Anthracene	300	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Phenanthrene	1000	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Fluoranthene	2100	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Pyrene	1100	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[a]anthracene	850	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Chrysene	870	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Bis(2-Ethylhexyl) Phthalate	BDL	ug/kg (dw)	3550/8270	380	01/02	01/03	LN
Benzo[b]fluoranthene	980	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[k]fluoranthene	330	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[a]pyrene	720	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Indeno[1,2,3-cd]pyrene	310	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Dibenzo[a,h]Anthracene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[g,h,i]perylene	360	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Dilution Factor	1.0		3550/8270		01/02	01/03	LN
Surrogate Recoveries:							
Nitrobenzene-d5	51	%	3550/8270	15-151	01/02	01/03	LN
2-Fluorobiphenyl	45	%	3550/8270	42-111	01/02	01/03	LN
Terphenyl-d14	31	%	3550/8270	37-143	01/02	01/03	LN

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Joe Kelly

Page: Page 3 of 3
 Date: 01/08/2004
 Log #: L85267-1

Sample Description:


MRC
 Proj.#: 02448B

Analytical Report: N-NW
 Date Sampled: 12/30/2003
 Time Sampled: 10:15
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
Base Neutral Compounds (continued)						

All analyses were performed using EPA, ASTM, MIOH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 960126 DOH# E86240 - NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Joe Kelly

Page: Page 1 of 3
 Date: 01/08/2004
 Log #: L85267-2

Sample Description:

MRC
 Proj. #: 02448B

Analytical Report: N-SW

Date Sampled: 12/30/2003
 Time Sampled: 10:20
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	90	%	SM2540B	0.10	01/02	01/02	KB
Volatiles Organic Compounds							
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Benzene	2.9	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
Bromoform	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
Chloroform	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	7.3	12/30	01/02	JA
Styrene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Toluene	16	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Trichloroethene	BDL	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	2.9	12/30	01/02	JA
Total Xylenes	17	ug/kg (dw)	5035/8260	3.7	12/30	01/02	JA
Dilution Factor	0.66		5035/8260		12/30	01/02	JA
Surrogate Recoveries:							
Dibromofluoromethane	98	%	5035/8260	52-155	12/30	01/02	JA

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Joe Kelly

Page: Page 2 of 3
 Date: 01/08/2004
 Log #: L85267-2

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-SW

Date Sampled: 12/30/2003
 Time Sampled: 10:20
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Toluene-D8	80	%	5035/8260	46-154	12/30	01/02	JA
4-Bromofluorobenzene	36	%	5035/8260	36-138	12/30	01/02	JA
Base Neutral Compounds							
Bis(2-Chloroethyl) Ether	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,4-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,2-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
N-Nitrosodi-n-propylamine	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,2,4-Trichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Naphthalene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Hexachlorocyclopentadiene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Acenaphthene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Fluorene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
N-Nitrosodiphenylamine	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Hexachlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Anthracene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Phenanthrene	280	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Fluoranthene	630	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Pyrene	340	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[a]anthracene	260	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Chrysene	280	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Bis(2-Ethylhexyl) Phthalate	BDL	ug/kg (dw)	3550/8270	370	01/02	01/03	LN
Benzo[b]fluoranthene	340	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[k]fluoranthene	110	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[a]pyrene	220	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Indeno[1,2,3-cd]pyrene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Dibenzo[a,h]Anthracene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[g,h,i]perylene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Dilution Factor	1.0		3550/8270		01/02	01/03	LN
Surrogate Recoveries:							
Nitrobenzene-d5	92	%	3550/8270	15-151	01/02	01/03	LN
2-Fluorobiphenyl	86	%	3550/8270	42-111	01/02	01/03	LN
Terphenyl-d14	68	%	3550/8270	37-143	01/02	01/03	LN

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Joe Kelly

Page: Page 3 of 3
 Date: 01/08/2004
 Log #: L85267-2

Sample Description:

MRC
 Proj.#: 02448B


Analytical Report: N-SW
 Date Sampled: 12/30/2003
 Time Sampled: 10:20
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Base Neutral Compounds (continued)							

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: SDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DON# E86240 NC CERT# 444
 SUB DON# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,


 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Joe Kelly

Page: Page 1 of 3
 Date: 01/08/2004
 Log #: L85267-3

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-EW
 Date Sampled: 12/30/2003
 Time Sampled: 10:25
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	92	%	SM2540B	0.10	01/02	01/02	KB
Volatiles Organic Compounds							
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.6	12/30	01/02	JA
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.6	12/30	01/02	JA
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.6	12/30	01/02	JA
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Benzene	2.3	ug/kg (dw)	5035/8260	1.6	12/30	01/02	JA
Bromoform	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.6	12/30	01/02	JA
Chloroform	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	8.0	12/30	01/02	JA
Styrene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Toluene	5.3	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Trichloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.2	12/30	01/02	JA
Total Xylenes	8.4	ug/kg (dw)	5035/8260	4.0	12/30	01/02	JA
Dilution Factor	0.74		5035/8260		12/30	01/02	JA
Surrogate Recoveries:							
Dibromofluoromethane	68	%	5035/8260	52-155	12/30	01/02	JA

Client #: CHI-00-030604
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 Joe Kelly

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 Date: 01/08/2004
 Log #: L85267-3

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-EW
 Date Sampled: 12/30/2003
 Time Sampled: 10:25
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Toluene-D8	45 MI	%	5035/8260	46-154	12/30	01/02	JA
4-Bromofluorobenzene	16 MI	%	5035/8260	36-138	12/30	01/02	JA
Base Neutral Compounds							
Bis(2-Chloroethyl) Ether	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,4-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,2-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
N-Nitrosodi-n-propylamine	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,2,4-Trichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Naphthalene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Hexachlorocyclopentadiene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Acenaphthene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Fluorene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
N-Nitrosodiphenylamine	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Hexachlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Anthracene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Phenanthrene	320	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Fluoranthene	760	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Pyrene	480	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[a]anthracene	360	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Chrysene	380	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Bis(2-Ethylhexyl) Phthalate	BDL	ug/kg (dw)	3550/8270	360	01/02	01/03	LN
Benzo[b]fluoranthene	550	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[k]fluoranthene	220	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[a]pyrene	320	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Indeno[1,2,3-cd]pyrene	200	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Dibenzo[a,h]Anthracene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[g,h,i]perylene	220	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Dilution Factor	1.0		3550/8270		01/02	01/03	LN
Surrogate Recoveries:							
Nitrobenzene-d5	90	%	3550/8270	15-151	01/02	01/03	LN
2-Fluorobiphenyl	90	%	3550/8270	42-111	01/02	01/03	LN
Terphenyl-d14	74	%	3550/8270	37-143	01/02	01/03	LN

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Sample Description:

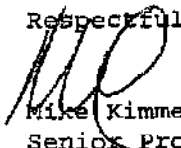
MRC
 Proj.#: 02448B

Analytical Report: N-EW
 Date Sampled: 12/30/2003
 Time Sampled: 10:25
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
Base Neutral Compounds (continued)						

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEP Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail &R or &RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and POL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Chicago, IL 60612
 Joe Kelly

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 Date: 01/08/2004
 Log #: L85267-4

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-WW
 Date Sampled: 12/30/2003
 Time Sampled: 10:30
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	76	%	SM2540B	0.10	01/02	01/02	KB
Volatile Organic Compounds							
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.8	12/30	01/02	JA
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.8	12/30	01/02	JA
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.8	12/30	01/02	JA
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Benzene	4.9	ug/kg (dw)	5035/8260	1.8	12/30	01/02	JA
Bromoform	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.8	12/30	01/02	JA
Chloroform	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	9.1	12/30	01/02	JA
Styrene	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Toluene	16	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Trichloroethene	BDL	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.6	12/30	01/02	JA
Total Xylenes	26	ug/kg (dw)	5035/8260	4.5	12/30	01/02	JA
Dilution Factor	0.69		5035/8260		12/30	01/02	JA
Surrogate Recoveries:							
Dibromofluoromethane	109	%	5035/8260	52-155	12/30	01/02	JA

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 Date: 01/08/2004
 Log #: L85267-4

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-WW
 Date Sampled: 12/30/2003
 Time Sampled: 10:30
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatile Organic Compounds (continued)							
Toluene-D8	89	%	5035/8260	46-154	12/30	01/02	JA
4-Bromofluorobenzene	47	%	5035/8260	36-138	12/30	01/02	JA
Base Neutral Compounds							
Bis(2-Chloroethyl) Ether	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
1,4-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
1,2-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
N-Nitrosodi-n-propylamine	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
1,2,4-Trichlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Naphthalene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Hexachlorocyclopentadiene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Acenaphthene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Fluorene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
N-Nitrosodiphenylamine	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Hexachlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Anthracene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Phenanthrene	320	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Fluoranthene	580	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Pyrene	360	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Benzo[a]anthracene	260	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Chrysene	250	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Bis(2-Ethylhexyl) Phthalate	BDL	ug/kg (dw)	3550/8270	430	01/05	01/03	LN
Benzo[b]fluoranthene	340	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Benzo[k]fluoranthene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Benzo[a]pyrene	210	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Indeno[1,2,3-cd]pyrene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Dibenzo[a,h]Anthracene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Benzo[g,h,i]perylene	BDL	ug/kg (dw)	3550/8270	130	01/05	01/03	LN
Dilution Factor	1.0		3550/8270		01/05	01/03	LN
Surrogate Recoveries:							
Nitrobenzene-d5	98	%	3550/8270	15-151	01/05	01/03	LN
2-Fluorobiphenyl	90	%	3550/8270	42-111	01/05	01/03	LN
Terphenyl-d14	77	%	3550/8270	37-143	01/05	01/03	LN

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 Date: 01/08/2004
 Log #: L85267-4

Sample Description:


MRC
 Proj.#: 02448B

Analytical Report: N-WW
 Date Sampled: 12/30/2003
 Time Sampled: 10:30
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
Base Neutral Compounds (continued)						

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=)-see attached USB code
 FLDEF Flags: J(=)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEF Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEF Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126	DOH# E86240	NC CERT# 444
SUB DOH# 86122,86109,E86048	ADEM ID# 40850	IL CERT# 200020
SC CERT# 96031001	TN CERT# 02985	
USACE	GA CERT# 917	
VA CERT# 00395	USDA Soil Permit# S-35240	

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Joe Kelly

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 Date: 01/08/2004
 Log #: L85267-5

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-Base-1
 Date Sampled: 12/30/2003
 Time Sampled: 10:35
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	75	%	SM2540B	0.10	01/02	01/02	KB
Volatile Organic Compounds							
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Benzene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
Bromoform	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/02	JA
Chloroform	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	7.7	12/30	01/02	JA
Styrene	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Toluene	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Trichloroethene	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.1	12/30	01/02	JA
Total Xylenes	BDL	ug/kg (dw)	5035/8260	3.9	12/30	01/02	JA
Dilution Factor	0.58		5035/8260		12/30	01/02	JA
Surrogate Recoveries:							
Dibromofluoromethane	100	%	5035/8260	52-155	12/30	01/02	JA

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 Date: 01/08/2004
 Log #: L85267-5

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-Base-1
 Date Sampled: 12/30/2003
 Time Sampled: 10:35
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatile Organic Compounds (continued)							
Toluene-D8	89	%	5035/8260	46-154	12/30	01/02	JA
4-Bromofluorobenzene	49	%	5035/8260	36-138	12/30	01/02	JA
Base Neutral Compounds							
Bis(2-Chloroethyl) Ether	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
1,4-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
1,2-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
N-Nitrosodi-n-propylamine	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
1,2,4-Trichlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Naphthalene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Hexachlorocyclopentadiene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Acenaphthene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Fluorene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
N-Nitrosodiphenylamine	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Hexachlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Anthracene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Phenanthrene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Fluoranthene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Pyrene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Benzo[a]anthracene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Chrysene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Bis(2-Ethylhexyl) Phthalate	BDL	ug/kg (dw)	3550/8270	440	01/02	01/03	LN
Benzo[b]fluoranthene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Benzo[k]fluoranthene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Benzo[a]pyrene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Indeno[1,2,3-cd]pyrene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Dibenzo[a,h]Anthracene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Benzo[g,h,i]perylene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Dilution Factor	1.0		3550/8270		01/02	01/03	LN
Surrogate Recoveries:							
Nitrobenzene-d5	87	%	3550/8270	15-151	01/02	01/03	LN
2-Fluorobiphenyl	85	%	3550/8270	42-111	01/02	01/03	LN
Terphenyl-d14	74	%	3550/8270	37-143	01/02	01/03	LN

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 Date: 01/08/2004
 Log #: L85267-5

Sample Description:

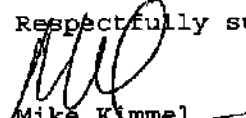
MRC
 Proj. #: 02448B

Analytical Report: N-Base-1
 Date Sampled: 12/30/2003
 Time Sampled: 10:35
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
Base Neutral Compounds (continued)						

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126	DOH# E86240	NC CERT# 444
SUB DOH# 96122,86109,E86048	ADEM ID# 40050	IL CERT# 200020
SC CERT# 96031001	TN CERT# 02985	
USACE	GA CERT# 917	
VA CERT# 00395	USDA Soil Permit# S-35240	

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

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 Address: Pioneer Environmental
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 Date: 01/08/2004
 Log #: L85267-6

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-Base-2
 Date Sampled: 12/30/2003
 Time Sampled: 10:40
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	78	%	SM2540B	0.10	01/02	01/02	KB
Volatile Organic Compounds							
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Benzene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
Bromoform	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
Chloroform	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	7.6	12/30	01/03	JA
Styrene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Toluene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Trichloroethene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.0	12/30	01/03	JA
Total Xylenes	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Dilution Factor	0.59		5035/8260		12/30	01/03	JA
Surrogate Recoveries:							
Dibromofluoromethane	112	%	5035/8260	52-155	12/30	01/03	JA

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 Date: 01/08/2004
 Log #: L85267-6

Sample Description:

MRC
 Proj. #: 02448B

Analytical Report: N-Base-2
 Date Sampled: 12/30/2003
 Time Sampled: 10:40
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Toluene-D8	112	%	5035/8260	46-154	12/30	01/03	JA
4-Bromofluorobenzene	72	%	5035/8260	36-138	12/30	01/03	JA
Base Neutral Compounds							
Bis(2-Chloroethyl) Ether	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
1,4-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
1,2-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
N-Nitrosodi-n-propylamine	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
1,2,4-Trichlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Naphthalene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Hexachlorocyclopentadiene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Acenaphthene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Fluorene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
N-Nitrosodiphenylamine	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Hexachlorobenzene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Anthracene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Phenanthrene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Fluoranthene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Pyrene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Benzo[a]anthracene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Chrysene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Bis(2-Ethylhexyl) Phthalate	BDL	ug/kg (dw)	3550/8270	420	01/02	01/03	LN
Benzo[b]fluoranthene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Benzo[k]fluoranthene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Benzo[a]pyrene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Indeno[1,2,3-cd]pyrene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Dibenzo[a,h]Anthracene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Benzo[g,h,i]perylene	BDL	ug/kg (dw)	3550/8270	130	01/02	01/03	LN
Dilution Factor	1.0		3550/8270		01/02	01/03	LN
Surrogate Recoveries:							
Nitrobenzene-d5	98	%	3550/8270	15-151	01/02	01/03	LN
2-Fluorobiphenyl	96	%	3550/8270	42-111	01/02	01/03	LN
Terphenyl-d14	73	%	3550/8270	37-143	01/02	01/03	LN

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 Date: 01/08/2004
 Log #: L85267-6

Sample Description:

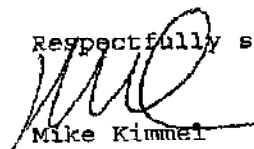
MRC
 Proj.#: 02448B

Analytical Report: N-Base-2
 Date Sampled: 12/30/2003
 Time Sampled: 10:40
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
Base Neutral Compounds (continued)						

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CPR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

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 Address: Pioneer Environmental
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 Date: 01/08/2004
 Log #: L85267-7

Sample Description:

MRC
 Proj. #: 02448B

Analytical Report: N-Backfill-1
 Date Sampled: 12/30/2003
 Time Sampled: 10:45
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	89	%	SM2540B	0.10	01/02	01/02	KB
Volatiles Organic Compounds							
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Benzene	2.9	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
Bromoform	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.5	12/30	01/03	JA
Chloroform	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	7.6	12/30	01/03	JA
Styrene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Toluene	8.2	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
trans-1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Trichloroethene	BDL	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.1	12/30	01/03	JA
Total Kxylenes	20	ug/kg (dw)	5035/8260	3.8	12/30	01/03	JA
Dilution Factor	0.68		5035/8260		12/30	01/03	JA
Surrogate Recoveries:							
Dibromofluoromethane	120	%	5035/8260	52-155	12/30	01/03	JA

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 Date: 01/08/2004
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Sample Description:

MRC
 Proj. #: 02448B

Analytical Report: N-Backfill-1
 Date Sampled: 12/30/2003
 Time Sampled: 10:45
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatile Organic Compounds (continued)							
Toluene-D8	98	%	5035/8260	46-154	12/30	01/03	JA
4-Bromofluorobenzene	59	%	5035/8260	36-138	12/30	01/03	JA
Base Neutral Compounds							
Bis(2-Chloroethyl) Ether	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,4-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,2-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
N-Nitrosodi-n-propylamine	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
1,2,4-Trichlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Naphthalene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Hexachlorocyclopentadiene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Acenaphthene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Fluorene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
N-Nitrosodiphenylamine	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Hexachlorobenzene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Anthracene	160	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Phenanthrene	650	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Fluoranthene	1000	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Pyrene	720	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[a]anthracene	450	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Chrysene	450	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Bis(2-Ethylhexyl) Phthalate	BDL	ug/kg (dw)	3550/8270	370	01/02	01/03	LN
Benzo[b]fluoranthene	570	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[k]fluoranthene	200	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[a]pyrene	370	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Indeno[1,2,3-cd]pyrene	170	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Dibenzo[a,h]Anthracene	BDL	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Benzo[g,h,i]perylene	190	ug/kg (dw)	3550/8270	110	01/02	01/03	LN
Dilution Factor	1.0		3550/8270		01/02	01/03	LN
Surrogate Recoveries:							
Nitrobenzene-d5	92	%	3550/8270	15-151	01/02	01/03	LN
2-Fluorobiphenyl	88	%	3550/8270	42-111	01/02	01/03	LN
Terphenyl-d14	75	%	3550/8270	37-143	01/02	01/03	LN

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 Date: 01/08/2004
 Log #: L85267-7

Sample Description:

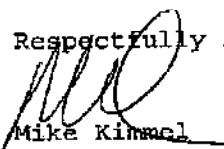
MRC
 Proj.#: 02448B

Analytical Report: N-Backfill-1
 Date Sampled: 12/30/2003
 Time Sampled: 10:45
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Base Neutral Compounds (continued)							

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NPL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: U(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# B86240 NC CERT# 444
 SUB DOH# 86122,86109,B86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
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Page: Page 1 of 3
 Date: 01/08/2004
 Log #: L85267-8

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: N-Backfill-2
 Date Sampled: 12/30/2003
 Time Sampled: 10:50
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	84	%	SM2540B	0.10	01/02	01/02	KB
Volatile Organic Compounds							
1,1-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
1,2-Dichloroethane	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
1,2-Dichloropropane	BDL	ug/kg (dw)	5035/8260	1.6	12/30	01/03	JA
cis-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.6	12/30	01/03	JA
trans-1,3-Dichloropropene	BDL	ug/kg (dw)	5035/8260	1.6	12/30	01/03	JA
1,1,1-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
1,1,2-Trichloroethane	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Benzene	3.2	ug/kg (dw)	5035/8260	1.6	12/30	01/03	JA
Bromoform	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Carbon Tetrachloride	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Chlorobenzene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Dibromochloromethane	BDL	ug/kg (dw)	5035/8260	1.6	12/30	01/03	JA
Chloroform	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
cis-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Methylene Chloride	BDL	ug/kg (dw)	5035/8260	8.0	12/30	01/03	JA
Styrene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Tetrachloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Toluene	12	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
trans-1,2-Dichloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Trichloroethene	BDL	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Vinyl Chloride	BDL	ug/kg (dw)	5035/8260	3.2	12/30	01/03	JA
Total Xylenes	30	ug/kg (dw)	5035/8260	4.0	12/30	01/03	JA
Dilution Factor	0.67		5035/8260		12/30	01/03	JA
Surrogate Recoveries:							
Dibromofluoromethane	121	%	5035/8260	52-155	12/30	01/03	JA

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Joe Kelly

Page: Page 2 of 3
 Date: 01/08/2004
 Log #: L85267-8

Sample Description:

MRC
 Proj. #: 02448B

Analytical Report: N-Backfill-2
 Date Sampled: 12/30/2003
 Time Sampled: 10:50
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Volatiles Organic Compounds (continued)							
Toluene-D8	100	%	5035/8260	46-154	12/30	01/03	JA
4-Bromofluorobenzene	71	%	5035/8260	36-138	12/30	01/03	JA
Base Neutral Compounds							
Bis(2-Chloroethyl) Ether	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
1,4-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
1,2-Dichlorobenzene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
N-Nitrosodi-n-propylamine	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
1,2,4-Trichlorobenzene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Naphthalene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Hexachlorocyclopentadiene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Acenaphthylene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Acenaphthene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Fluorene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
N-Nitrosodiphenylamine	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Hexachlorobenzene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Anthracene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Phenanthrene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Fluoranthene	150	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Pyrene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Benzo[a]anthracene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Chrysene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Bis(2-Ethylhexyl) Phthalate	BDL	ug/kg (dw)	3550/8270	390	01/02	01/03	LN
Benzo[b]fluoranthene	130	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Benzo[k]fluoranthene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Benzo[a]pyrene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Indeno[1,2,3-cd]pyrene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Dibenzo[a,h]Anthracene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Benzo[g,h,i]perylene	BDL	ug/kg (dw)	3550/8270	120	01/02	01/03	LN
Dilution Factor	1.0		3550/8270		01/02	01/03	LN
Surrogate Recoveries:							
Nitrobenzene-d5	103	%	3550/8270	15-151	01/02	01/03	LN
2-Fluorobiphenyl	96	%	3550/8270	42-111	01/02	01/03	LN
Terphenyl-d14	88	%	3550/8270	37-143	01/02	01/03	LN

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 Date: 01/08/2004
 Log #: L85267-8

Sample Description:

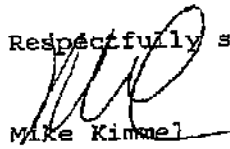
MRC
 Proj.#: 02448B

Analytical Report: N-Backfill-2
 Date Sampled: 12/30/2003
 Time Sampled: 10:50
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Extr. Limit	Anly. Date	Analyst
Base Neutral Compounds (continued)						

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAP requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980125	DOH# E86240	NC CERT# 444
SUB DOH# 86122,86109,E86048	ADEM ID# 40850	IL CERT# 200020
SC CERT# 96031001	TN CERT# 02985	
USACE	GA CERT# 917	
VA CERT# 00395	USDA Soil Permit# S-35240	

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Chicago, IL 60612
 Joe Kelly

Page: Page 1 of 1
 Date: 01/08/2004
 Log #: L85267-9

Sample Description:

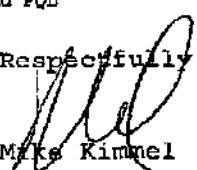
MRC
 Proj.#: 02448B

Analytical Report: G-Base
 Date Sampled: 12/30/2003
 Time Sampled: 11:05
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	79	%	SM2540B	0.10	01/02	01/02	KB
BTEX Compounds							
Benzene	4.8	ug/kg (dw)	5035/8260	2.1	12/30	01/03	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	5.2	12/30	01/03	JA
Toluene	10	ug/kg (dw)	5035/8260	5.2	12/30	01/03	JA
Total Xylenes	BDL	ug/kg (dw)	5035/8260	5.2	12/30	01/03	JA
Total BTEX	14.8 I	ug/kg (dw)	5035/8260	18	12/30	01/03	JA
MTBE	BDL	ug/kg (dw)	5035/8260	5.2	12/30	01/03	JA
Dilution Factor	0.82		5035/8260		12/30	01/03	JA
Surrogate Recoveries:							
Dibromofluoromethane	34 MI	%	5035/8260	52-155	12/30	01/03	JA
Toluene-D8	21 MI	%	5035/8260	46-154	12/30	01/03	JA
4-Bromofluorobenzene	5.5 MI	%	5035/8260	36-138	12/30	01/03	JA
Metals							
Lead	320000	ug/kg (dw)	3050/6010	6300	01/06	01/08	SB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail % or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE CA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Joe Kelly

Page: Page 1 of 1
 Date: 01/08/2004
 Log #: L85267-10

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: G-Backfill
 Date Sampled: 12/30/2003
 Time Sampled: 11:10
 Date Received: 12/31/2003
 Collected By: Client

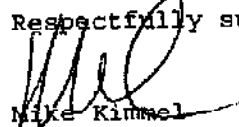
Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Percent Solids							
Percent Solid	80	%	SM2540B	0.10	01/02	01/02	KB
BTEX Compounds							
Benzene	3.4	ug/kg (dw)	5035/8260	2.0	12/30	01/05	JA
Ethylbenzene	BDL	ug/kg (dw)	5035/8260	5.0	12/30	01/05	JA
Toluene	BDL	ug/kg (dw)	5035/8260	5.0	12/30	01/05	JA
Total Xylenes	BDL	ug/kg (dw)	5035/8260	5.0	12/30	01/05	JA
Total BTEX	3.4	ug/kg (dw)	5035/8260	17	12/30	01/05	JA
MTBE	BDL	ug/kg (dw)	5035/8260	5.0	12/30	01/05	JA
Dilution Factor	0.80		5035/8260		12/30	01/05	JA
Surrogate Recoveries:							
Dibromofluoromethane	57	%	5035/8260	52-155	12/30	01/05	JA
Toluene-D8	37 MI	%	5035/8260	46-154	12/30	01/05	JA
4-Bromofluorobenzene	21 MI	%	5035/8260	36-138	12/30	01/05	JA
Metals							
Lead	280000	ug/kg (dw)	3050/6010	6300	01/06	01/08	SB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NPL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail 4R or 4RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126
 SUB DOH# 86122,86109,E86048
 SC CERT# 96031001
 USACE
 VA CERT# 00395

DOH# E86240
 ADEM ID# 40850
 TN CERT# 02985
 GA CERT# 917
 USDA Soil Permit# S-35240

NC CERT# 444
 IL CERT# 200020

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
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 Chicago, IL 60612
 Joe Kelly

Page: Page 1 of 1
 Date: 01/08/2004
 Log #: L85267-11

Sample Description:


MRC
 Proj.#: 02448B

Analytical Report: M-Base-1
 Date Sampled: 12/30/2003
 Time Sampled: 13:10
 Date Received: 12/31/2003
 Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
Series Data							
Methanol	BDL	mg/kg (dw)	MOD 8015	12	01/06	01/06	RR
Dilution Factor	1.0		MOD 8015		01/06	01/06	RR
Percent Solids							
Percent Solid	81	%	SM2540B	0.10	01/02	01/02	KB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail tR or tRPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126 DOH# E86240 NC CERT# 444
 SUB DOH# 86122,86109,E86048 ADEM ID# 40850 IL CERT# 200020
 SC CERT# 96031001 TN CERT# 02985
 USACE GA CERT# 917
 VA CERT# 00395 USDA Soil Permit# S-35240

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

Client #: CHI-00-030604
 Address: Pioneer Environmental
 700 N. Sacramento
 Suite 100
 Chicago, IL 60612
 Joe Kelly

Page: Page 1 of 1
 Date: 01/08/2004
 Log #: L85267-12

Sample Description:

MRC
 Proj.#: 02448B

Analytical Report: M-Backfill-1
 Date Sampled: 12/30/2003
 Time Sampled: 13:15
 Date Received: 12/31/2003
 Collected By: Client

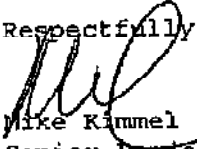
Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analyst
E-Series DAI							
Methanol	BDL	mg/kg (dw)	MOD 8015	11	01/06	01/06	RR
Dilution Factor	1.0		MOD 8015		01/06	01/06	RR
Percent Solids							
Percent Solid	88	%	SM2540B	0.10	01/02	01/02	KB

All analyses were performed using EPA, ASTM, NIOSH, USGS, or Standard Methods and certified to meet NELAC requirements.
 Flags: BDL or U-below reporting limit; DL-diluted out; IL-meets internal lab limits; MI-matrix interference; NA-not appl.
 Flags: CFR-Pb/Cu rule; ND-non detect (RL estimated); NPL-no free liquids; dw-dry wt; ww-wet wt; C(#)-see attached USB code
 FLDEP Flags: J(#)-estimated 1:surr. fail 2:no known QC req. 3:QC fail %R or %RPD; 4:matrix int. 5:improper fld. protocol
 FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
 FLDEP Flags: Y-improper preservation; B-colonies exceed range; I-result between MDL and PQL

QAP# 980126
 SUB DON# 86122,86109,886048
 SC CERT# 96031001
 USACE
 VA CERT# 00395

DOH# E86240
 ADEM ID# 40850
 TN CERT# 02985
 GA CERT# 917
 USDA Soil Permit# S-35240

NC CERT# 444
 IL CERT# 200020

Respectfully submitted,

 Mike Kimmel
 Senior Project Manager

SAMPLES INTACT upon arrival?
Received ON WET KE7 Temp
PROPER PRESERVATIVES Indicated?
Received WITHIN HOLDING TIME?

C.O.C. # 67290

Company Name		Joe Kelly		PO# 024488	
Address		709 N. Sacramento #100			
City		Chicago		State IL ZIP 60612	
Attn:		Jellye Power		Fax# 3125878210	
Project Name		MEL		Proj# 024488	
Sampler Name/Signature		[Signature]		Phone# 3125871024	
Parameters					
Methanol					
Hold					
04a					
Field Filtered <input checked="" type="checkbox"/> N					
Integrity <input checked="" type="checkbox"/> OK <input type="checkbox"/> N/A					

LI	M-S-X-1	12/30/03	1310	50	1	4oz
12	M-Back L1-1	"	1315	"	"	"
13	M-Base-2		1320	1		
14	M-Back L1-2		1325			
15	M-MW-1		1330			
16	M-MW-2		1335			
17	M-SW-1		1340			
18	M-SW-2		1345			
19	M-FW		1350			
20	M-MW		1355			

PA	Date required	Y	N	None	1	2	3	Other	① N	WB	
			✓								
					12/31/03	11"		John Fawcett		12/31/03	11"
					12/31/03	15"		FedEx-MW		12/31/03	15"
								Kenneth Co		12/31/03	110"

32321 N.W. 7th Avenue
Boca Raton, FL 33431
888-862-LABS
561-447-7373
888-456-4846 Fax
561-447-6136 Fax
C.O.C. # 67291

02/27/04 FRI 17:07 FAX 561 447 6138

USB10SYSTEMS

001



Client #: CHI-00-030604
Address: Pioneer Environmental
700 N. Sacramento
Suite 100
Chicago, IL 60612
Joe Kelly

Page: Page 1 of 1
Date: 02/27/2004
Log #: L87546-1

Sample Description:

MRC
Proj.#: 02448B

Analytical Report: M-Base-2
Date Sampled: 12/30/2003
Time Sampled: 13:20
Date Received: 02/24/2004
Collected By: Client

Parameter	Results	Units	Method	Reportable Limit	Extr. Date	Anly. Date	Analys
Organic Content	3.0	%	D2974-87	0.10	02/27	02/27	HH
Percent Ash	97	%	160.4	0.10	02/26	02/26	SR
Percent Volatile Solids	3.0	%	SM2540E	0.10	02/26	02/26	SR

All analyses were performed using EPA, ASTM, NYNEM, USGS, or Standard Methods and certified to meet NELAP requirements.
Flags: NDh or U-below reporting limit; DL-diluted out; 1Q-meets internal lab limits; MI-matrix interference; NA-not Appl.
Flags: CFR-PL/Cu rule; ND-non detector (NA estimated); NFL-no free liquids; dw-dry wt; ww-wet wt; C(=) see attached USB code
FLDEP Flags: U(=)-estimated 1:surr. fail 2:no known QC swg. 3:QC fail SR or SRDP; 4:matrix int. 5:improper fld. protocol
FLDEP Flags: L-exceeds calibration; Q-holding time exceeded; T-value < MDL; V-present in blank
FLDEP Flags: Y-improper preservation; B-colonies exceed range; 1 result between MDL and POL

QAPP 060126 DOH# E86210 NC CERT# 444
CUR DOH# 86122, 86109, 86604V ADEM ID# 40850 IL CERT# 200820
SC CERT# 96031001 TN CERT# 02965
USACE GA CERT# 917
VA CERT# 00395 USDA Soil Permit# S-35340

Respectfully submitted,

[Signature]
Mike Kimmel
Senior Project Manager

APPENDIX G
TIER 2 SRO CALCULATIONS

TIER 2 & GROUNDWATER MODELING PARAMETERS

Pioneer developed Tier 2 SROs for the site utilizing generally-accepted third-party software (TACO PRO 2.0™ for Windows™) to perform the (35 IAC Part 742 (TACO), Appendix C, Table A) calculations for equations S1, S3, S4-S10, S17-S25, and S29 for PCE. The calculations for equations R12 through R24 were performed for PNAs. The *default* input parameters provided in TACO were the only variables utilized in the equations, with the exception of the site-specific parameters noted. The default parameters provided in the TACO regulations, and site-specific variables utilized in the equations are summarized below.

1. Henry's Law Constant = (chemical-specific, Part 742, Appendix C, Table E);
2. Volumetric Water Content in Vadose Zone Soils = 0.15 (Surface Default, Part 742, Appendix C, Table D);
3. Volumetric Air Content in Vadose Zone Soils = 0.28 (Surface Default, Part 742, Appendix C, Table D);
4. Soil Bulk Density = 1.5 (Default, Appendix C, Table D);
5. Organic Carbon Partition Coefficient = (Chemical-Specific, Appendix C, Table E);
6. Infiltration Rate = 30 (Default, Appendix C, Table D); and,
7. Groundwater Mixing Zone Thickness = 200 (Default, Appendix C, Table D).
8. Source width perpendicular to groundwater flow direction in the vertical plane (S_d) = 200 (Default Appendix C, Table D);
9. First Order Degradation Constants = chemical-specific (Part 742, Appendix C, Table E);
10. Total Soil Porosity = 0.43 (Default, Appendix C, Table D);
11. Organic carbon content (f_{oc}) = 3.0%, based on the measured f_{oc} in the site's soil;
12. Hydraulic conductivity (K) = 1.7×10^{-5} cm/s, based on the results of site-specific analyses obtained from a second MRC SRP site, located approximately 1 block northeast of Remediation Site, at 3535 W. 31st Street, Chicago;
13. Hydraulic gradient (i) = 0.01 cm/cm (conservatively estimated gradient).
14. Width of source area parallel (W) and perpendicular (S_w) to groundwater flow. For PNAs, considering the only *potential* for groundwater impact based on soils data was identified at B-15, a source area (approximately 20 feet by 20 feet) was utilized in the calculations.
 - a. W, S_w (various PNAs) = 600 cm.
15. Distance along the centerline of groundwater plume (X). A conservative distance from the source area to the property line was utilized in the calculation (X = 200 cm, or approximately 3 feet).

Datasheet: RBCA Parameters

Parameter	Units	Value Used
ATn	yr	Residential = 30 Industrial/Commercial = 25 Construction Worker = .115
ATe	yr	70
BW	kg	Residential = 70
ED	yr	Residential = 30 Industrial/Commercial = 25 Construction Worker = 1
EF	d/yr	Residential = 350 Industrial/Commercial = 250 Construction Worker = 30
I (Infiltration Rate)	cm/yr	30
IRair	m3/d	20
IRsoil	mg/d	Residential = 100 Industrial/Commercial = 50 Construction Worker = 480
IRw	L/d	Residential = 2 Industrial/Commercial = 1
Ls	cm	100
M	mg/cm2	.5
Pe	g/cm2-s	.00000000000069
RAFd	unitless	Volatiles = .5 PNAs = .05 Metals = 0
RAFo	unitless	1
SA	cm2/d	3160
THQ (Target Hazard Quotient)	unitless	1
TR (Target Cancer Risk)	unitless	.000001
Uair	cm/s	225
Ambient Air Mixing Zone Height	cm	200
Groundwater Mixing Zone Thickness	cm	200
Averaging Time for Vapor Flux	s	946000000

Datasheet: Chemical Properties for the RBCA Equations

Chemical	Solubility in Water (mg/L)	Diffusivity in Air (cm ² /s)	Diffusivity in Water (cm ² /s)	Henry's Law Constant (unitless)	Organic Carbon Partition Coefficient (cm ³ /g)	First Order Degradation Constant (1/d)
Benzo(a)anthracene	.0094	.051	.000008	.00137	398000	.00051
Benzo(b)fluoranthene	.0015	.0226	5.56E-06	.00455	1230000	.00057

Datasheet: Toxicological Properties for the RBCA Equations

Chemical	RfDo (mg/kg-d)	RfDi (mg/kg-d)	RfDs (mg/kg-d)	RfDis (mg/kg-d)	SFo [1/(mg/kg-d)]	SFi [1/(mg/kg-d)]
Benzo(a)anthracene	--	--	--	--	.73	--
Benzo(b)fluoranthene	--	--	--	--	.73	--

Datasheet: Physical Soil Parameters for the RBCA Equations

Parameter	Units	Value Used
Soil Bulk Density	g/cm3	1.5
Organic Carbon Content (Surface Soil)	g/g (unitless)	.03
Organic Carbon Content (Subsurface Soil)	g/g (unitless)	.03
Total Soil Porosity	cm3/cm3 (unitless)	.43
Volumetric Air Content in Vadose Zone Soils (Surface)	cm3/cm3 (unitless)	.28
Volumetric Air Content in Vadose Zone Soils (Subsurface)	cm3/cm3 (unitless)	.13
Volumetric Water Content in Vadose Zone Soils (Surface)	cm3/cm3 (unitless)	.15
Volumetric Water Content in Vadose Zone Soils (Subsurface)	cm3/cm3 (unitless)	.3
Lower Depth of Surficial Soil Zone	cm	100
Hydraulic Gradient	cm/cm	.01
Hydraulic Conductivity	cm/d	1.488
Source Width perpendicular to Groundwater Flow Direction in Vertical Plane	cm	200
Source Width perpendicular to Groundwater Flow Direction in Horizontal Plane	cm	600
Specific Discharge	cm/d	3.413954E-02
Groundwater Darcy Velocity	cm/yr	5.3582
Width of Source Area parallel to Wind Movement	cm	600
Width of Source Area parallel to Groundwater Movement	cm	600
Distance along centerline of plume emanating from the source	cm	200
Longitudinal Dispersivity	cm	20
Transverse Dispersivity	cm	8.666667
Vertical Dispersivity	cm	1
pH	unitless	8

Datasheet: RBCA Calculated Values - 1 of 2

Chemical	VFp (kg/m3)	VFes (kg/m3)	VFsam b (kg/m3)	RBSLair (residential) (ug/m3)
Benzo(a)anthracene	9.2E-13	4.361475E-09	---	---
Benzo(b)fluoranthene	9.2E-13	8.862441E-09	---	---

Datasheet: RBCA Calculated Values - 2 of 2

Chemical	ks (surface) (g/g)	ks (subsurface) (g/g)	Ds(aff) (surface) (cm ² /s)	Ds(aff) (subsurface) (cm ² /s)	LFsw (mg/L)/(mg/kg)
Benzo(a)anthracene	11940	11940	4.619207E-03	---	7.904472E-05
Benzo(b)fluoranthene	36900	36900	1.774746E-03	---	2.557736E-05

Datasheet: RBCA Calculated Values - 1 of 2

Chemical	VFp (kg/m3)	VFes (kg/m3)	VFesmb (kg/m3)	RBSLair (industrial/commercial) (ug/m3)	RBSLair (construction worker) (ug/m3)
Benzo(a)anthracene	9.2E-13	4.361475E-09	---	---	---
Benzo(b)fluoranthene	9.2E-13	8.862441E-09	---	---	---

Datasheet: RBCA Calculated Values - 2 of 2

Chemical	ks (surface) (g/g)	ks (subsurface) (g/g)	Ds(eff) (surface) (cm ² /s)	Ds(eff) (subsurface) (cm ² /s)	LF-sw (mg/L)/(mg/kg)
Benzo(a)anthracene	11940	11940	4.618207E-03	—	7.904472E-05
Benzo(b)fluoranthene	36900	36900	1.774746E-03	—	2.557738E-05

Datasheet: RBCA Source Concentration and Groundwater Impact

Chemical	Csource (mg/L)	Groundwater Impact C(x) (mg/L)	C(x)/Csource (unitless)
Benzo(a)anthracene	—	---	9.000168E-02
Benzo(b)fluoranthene	—	---	7.125503E-02

Datasheet: RBCA Soil Saturation Limits (C_{sat}) for Chemicals with Melting Point < 30 deg C

Chemical	C _{sat} (surface) (mg/kg)	C _{sat} (subsurface) (mg/kg)
----------	------------------------------------	---------------------------------------

Datasheet: RBCA Soil Remediation Objectives (mg/kg) - Residential

CAS No.	Chemical	Ingestion	Inhalation	Migration to Class I Groundwater	Migration to Class II Groundwater
56-55-3	Benzo(a)anthracene	1.303538	---	18.27342	91.3671
205-99-2	Benzo(b)fluoranthene	1.303538	---	98.76459	493.8229

Datasheet: RBCA Groundwater Remediation Objectives (mg/L) - Residential

CAS No.	Chemical	Class I Groundwater	Class II Groundwater
56-55-3	Benzo(a)anthracene	.00013	.00055
205-99-2	Benzo(b)fluoranthene	.00018	.0009

Datasheet: RBCA GW Remediation Objectives (mg/L) - Carcinogenic Cumulative Effects - Residential

CAS No.	Chemical	Class I Groundwater	Class II Groundwater
Gastrointestinal System			
56-55-3	Benzo(a)anthracene	.000065	.000325
205-99-2	Benzo(b)fluoranthene	.00009	.00045

Datasheet: RBCA Soil Remediation Objectives (mg/kg) - Industrial/Commercial

Chemical	Ingestion	Inhalation	Construction Worker Ingestion	Construction Worker Inhalation	Migration to Class I Groundwater	Migration to Class II Groundwater
Benzo(a)anthracene	3.038759	---	112.2369	---	18.27342	91.3671
Benzo(b)fluoranthene	3.038759	---	55.35015	---	98.76459	493.8229

Datasheet: RBCA Groundwater Remediation Objectives (mg/L) - Industrial/Commercial

CAS No.	Chemical	Class I Groundwater	Class II Groundwater
56-55-3	Benzo(a)anthracene	.00013	.00055
205-99-2	Benzo(b)fluoranthene	.00016	.0009

Datasheet: RBCA GW Remediation Objectives (mg/L) - Carcinogenic Cumulative Effects - Industrial

CAS No.	Chemical	Class I Groundwater	Class II Groundwater
Gastrointestinal System			
56-55-3	Benzo(a)anthracene	.000065	.000325
205-99-2	Benzo(b)fluoranthene	.00009	.00045

Datasheet: SSL Parameters

Parameter	Units	Value Used
AT for Ingestion of Noncarcinogens	yr	Residential = 6 Industrial/Commercial = 25 Construction Worker = .115
AT for Inhalation of Noncarcinogens	yr	Residential = 30 Industrial/Commercial = 25 Construction Worker = .115
ATc for Carcinogens	yr	70
BW	kg	Residential = 15, noncarcinogens Residential = 70, carcinogens Industrial/Commercial = 70 Construction Worker = 70
ED for Ingestion of Carcinogens	yr	Industrial/Commercial = 25 Construction Worker = 1
ED for Inhalation of Carcinogens	yr	Residential = 30 Industrial/Commercial = 25 Construction Worker = 1
ED for Ingestion of Noncarcinogens	yr	Residential = 6 Industrial/Commercial = 25 Construction Worker = 1
ED for Inhalation of Noncarcinogens	yr	Residential = 30 Industrial/Commercial = 25 Construction Worker = 1
ED for Groundwater Ingestion	yr	Residential = 30 Industrial/Commercial = 25 Construction Worker = 1
ED for Mass-Limit Eqn.	yr	70
EF	d/yr	Residential = 350 Industrial/Commercial = 250 Construction Worker = 30
F(x)	unitless	.194
I (Infiltration Rate)	m/yr	.3
I (Infiltration Rate for Mass-Limit Eqn.)	m/yr	.18
IFsoil-adj (Residential)	(mg-yr)/(kg-d)	114
IRsoil	mg/d	Residential = 200 Industrial/Commercial = 50 Construction Worker = 480
PEF (Residential)	m3/kg	1320000000
PEF (Industrial/Commercial)	m3/kg	1240000000
PEF* (Construction Worker)	m3/kg	124000000
Q/C for PEF	(g/m2-s)/(kg/m3)	Residential = 85.81 Industrial/Commercial = 85.81 Construction Worker = 85.81
Q/C for VF	(g/m2-s)/(kg/m3)	Residential = 85.81 Industrial/Commercial = 85.81 Construction Worker = 85.81
Q/C for VF (site specific)	(g/m2-s)/(kg/m3)	97.78
T (Exposure Interval)	s	Residential = 950000000 Industrial/Commercial = 790000000 Construction Worker = 3600000
T (Exposure Interval for Mass-Limit Eqn.)	yr	30
THQ (Target Hazard Quotient)	unitless	1
TR (Target Cancer Risk)	unitless	.000001
Um	m/s	4.69
Ut	m/s	11.32
V	unitless	.5

Datasheet: Chemical Properties for the SSL Equations

Chemical	Solubility in Water (mg/L)	Diffusivity in Air (cm ² /s)	Diffusivity in Water (cm ² /s)	Henry's Law Constant (unitless)	Organic Carbon Partition Coefficient (cm ³ /g)
Tetrachloroethylene	200	.072	.0000082	.754	155

Datasheet: Toxicological Properties for the SSL Equations

Chemical	RfDo (mg/kg-d)	RfC (mg/m3)	RfDs (mg/kg-d)	RfCs (mg/m3)	SFo [1/(mg/kg-d)]	URF [1/(ug/m3)]
Tetrachloroethylene	.01	—	.1	—	.052	5.8E-07

Datasheet: Physical Soil Parameters for the SSL Equations

Parameter	Units	Value Used
Soil Bulk Density	kg/L	1.5
Organic Carbon Content (Surface Soil)	g/g (unitless)	.03
Organic Carbon Content (Subsurface Soil)	g/g (unitless)	.03
Total Soil Porosity	L/L (unitless)	.43
Air-Filled Soil Porosity (Surface Soil)	L/L (unitless)	.28
Air-Filled Soil Porosity (Subsurface Soil)	L/L (unitless)	.13
Water-Filled Soil Porosity (Surface Soil)	L/L (unitless)	.15
Water-Filled Soil Porosity (Subsurface Soil)	L/L (unitless)	.3
Mixing Zone Depth	m	—
Aquifer Thickness	m	—
Dilution Factor	unitless	20
Hydraulic Gradient	m/m	—
Hydraulic Conductivity	m/yr	—
Source Length Parallel to GW flow	m	—
Depth of Contaminant Source	m	2
Area of Contaminant Source	acres	.25
pH	unitless	8

Datasheet: SSL Calculated Values

Chemical	Kd (surface) (cm ³ /g)	Kd (subsurface) (cm ³ /g)	Da (cm ² /s)	VF (m ³ /kg)	VF' (m ³ /kg)	Cw (residential) (mg/L)	Cw (industrial) (mg/L)
Tetrachloroethylene	4.65	4.65	5.772247E-04	30800.7	3080.07	9.999999E-02	.5

Datasheet: SSL Soil Saturation Limits (Csat) for Chemicals with Melting Point < 30 deg C

Chemical	Csat (surface) (mg/kg)	Csat (subsurface) (mg/kg)
Tetrachloroethylene	978.1494	983.0693

Datasheet: SSL Soil Remediation Objectives (mg/kg) - Residential

CAS No.	Chemical	Ingestion	Inhalation	Migration to Class I Groundwater	Migration to Class II Groundwater
127-18-4	Tetrachloroethylene	12.31444	129.2213	.42	2.1

Datasheet: SSL Groundwater Remediation Objectives (mg/L) - Residential

CAS No.	Chemical	Class I Groundwater	Class II Groundwater
127-18-4	Tetrachloroethylene	.005	.025

Datasheet: SSL GW Remediation Objectives (mg/L) - Carcinogenic Cumulative Effects - Residential

CAS No.	Chemical	Class I Groundwater	Class II Groundwater
Liver			
127-18-4	Tetrachloroethylene	.005	.025

Datasheet: SSL Soil Remediation Objectives (mg/kg) - Industrial/Commercial

CAS No.	Chemical	Ingestion	Inhalation	Construction Worker Ingestion	Construction Worker Inhalation	Migration to Class I Groundwater	Migration to Class II Groundwater
127-18-4	Tetrachloroethylene	110.0615	217.0918	2388.488	978.1494	.42	2.1

Datasheet: SSL Groundwater Remediation Objectives (mg/L) - Industrial/Commercial

CAS No.	Chemical	Class I Groundwater	Class II Groundwater
127-18-4	Tetrachloroethylene	.005	.025

Datasheet: SSL GW Remediation Objectives (mg/L) - Carcinogenic Cumulative Effects - Industrial

CAS No.	Chemical	Class I Groundwater	Class II Groundwater
Liver			
127-18-4	Tetrachloroethylene	.005	.025

APPENDIX H
GROUNDWATER ORDINANCE & WELL SEARCH RESULTS

ORDINANCE

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:

SECTION 1. Chapter 11-8 of the Municipal Code of Chicago is hereby amended by adding a new section 11-8-385 and by amending Section 11-8-390 by inserting the language underscored, as follows:

11-8-385 Potable water defined.

Potable water is any water used for human consumption, including, but not limited to water used for drinking, bathing, washing dishes, preparing foods and watering gardens in which produce intended for human consumption is grown.

11-8-390 Prohibited use of secondary water; Prohibited installation of new potable water supply wells.

No secondary water shall overflow into or be discharged into any surge tank, storage tank, or reservoir, or shall in any way be piped or conveyed into the water supply system of any building, structure, or premises to become a part of or be mixed with the fresh water supply from the mains of the Chicago Waterworks System either inside of the premises or in the water service pipe. Secondary water shall not be piped to or used in any plumbing fixture, or for cooling crushers, rollers, or mixers where foods, candies, liquids or materials are manufactured for human or animal consumption. No connection, tap, or opening shall be made in a water distribution system other than an approved water distribution system which will permit such water being used for drinking.

Wherever the fire-protective equipment in any building, structure, or premises has service from the Chicago Waterworks System, no pipe or other conduit which conveys secondary water shall be cross-connected to the fire-protective equipment. All fire-protective equipment connected to the Chicago Waterworks System shall be constructed in such manner that all tanks, pipes, pumps, surge tanks, and fire hydrants can be thoroughly drained, flushed, and cleaned by the owners of such equipment and premises and there shall be no direct connections from the tanks, pipes, and other equipment to any drainage pipes or sewers. No groundwater well, cistern or other groundwater collection device installed after the effective date of this amendatory ordinance may be used to supply any potable water supply system, except at points of withdrawal by the City of Chicago or by units of local government pursuant to intergovernmental agreement with the City of Chicago.

SECTION 2. Section 2-30-030 of the Municipal Code of Chicago is hereby amended by deleting the language bracketed and inserting the language underscored, as follows:

2-30-030 Commissioner -- Powers and duties designated.

The commissioner of the environment shall have the following powers and duties:

(21) To enter into grant agreements, cooperation agreements and other agreements or contracts with governmental entities, private business and civic and community groups necessary to implement the Green Streets Program and other urban forestry, beautification and environmental enhancement programs; and agreements to implement the State of Illinois Site Remediation

Program:

.....

SECTION 3. This ordinance shall be in full force and effect from and after its passage and approval.

JUL-10-97 THU 03:34 PM

IL EPA*DIV LEGAL*CHURCH

FAX NO. 2177829807

P.02



City of Chicago
Richard M. Daley, Mayor

Department of Law
Susan S. Sher
Corporation Counsel

Suite 900
39 North LaSalle Street
Chicago, Illinois 60602
(312) 744-9010
(312) 744-6798 (FAX)

July 2, 1997

BY EXPRESS MAIL

RECEIVED

Mr. Gary P. King
Manager, Division of Remediation Management
Bureau of Land
Illinois Environmental Protection Agency
1001 N. Grand Avenue, East
Springfield, IL 62702

JUL 03 1997

I.E.P.A. / B.O.L.

Re: Memorandum of Understanding Between City of Chicago and
IEPA

Dear Mr. King:

Enclosed please find two executed copies of the Memorandum of Understanding ("MOU") between the City of Chicago and the Illinois Environmental Protection Agency, pursuant to 35 Ill. Adm. Code 742.1015. As I discussed earlier with Mark Wight, the version of the MOU that is enclosed varies from the one you and he approved only in that there are two exhibits rather than three, since the new groundwater ordinance also includes a provision authorizing the City of Chicago's Commissioner of Environment to enter into this MOU, thus simultaneously satisfying the requirements of 35 Ill. Adm. Code 742.1015(i)(3) and 742.1015(i)(1), relating to required MOU attachments. As to the remaining attachment (identification of the legal boundaries within which the Potable Water Supply Well Ordinance is applicable), Mr. Wight said that a letter from a City official stating that the ordinance applied throughout the City would satisfy the requirements of 35 Ill. Adm. Code 742.1015(i)(2). A letter to that effect is attached as Exhibit B.

Please execute both documents and return the one marked "City Copy" to me for our files. If you have any questions, do not hesitate to contact me at 312-744-6904.

Sincerely,

Mort P. Ames

Mort P. Ames

Assistant Corporation Counsel

Encl.

cc w/o encl.: Henry L. Henderson
Jessica Rio
Jill Winemanz



MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF CHICAGO, ILLINOIS AND THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REGARDING (A) THE USE OF A LOCAL POTABLE WATER SUPPLY WELL ORDINANCE AS AN ENVIRONMENTAL INSTITUTIONAL CONTROL AND (B) THE PROVISION OF INFORMATION RELATING TO "NO FURTHER REMEDIATION" DETERMINATIONS BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY TO THE CITY OF CHICAGO

I. PURPOSE AND INTENT

- A. This Memorandum of Understanding ("MOU") is entered into between the City of Chicago, Illinois ("the City") and the Illinois Environmental Protection Agency ("Illinois EPA") for the purpose of (a) satisfying the requirements of 35 Ill. Adm. Code 742.1015 for the use of potable water supply well ordinances as environmental institutional controls and (b) ensuring that the City will be provided with copies of all "No Further Remediation" letters or determinations issued by the Illinois EPA pursuant to specific programs for sites located within the boundaries of Chicago, Illinois, in order to enable the City to maintain a complete and up-to-date registry of sites as required by 35 Ill. Adm. Code 742.1015(i)(5). The Illinois EPA has reviewed Sections 11-8-385 and 11-8-390 of the Municipal Code of Chicago as amended by Ordinance Number 097990 ("Potable Water Supply Well Ordinance"), attached as Attachment A, and has determined that the Municipal Code of Chicago prohibits the installation and use of new potable water supply wells by private entities but will allow the installation of potable water supply wells by the City and other units of local government pursuant to intergovernmental agreements with the City. In such cases, 35 Ill. Adm. Code 742.1015(a) provides that the City may enter into an MOU with the Illinois EPA to allow the use of the ordinance as an institutional control.
- B. The intent of this Memorandum of Understanding is to (a) specify the responsibilities that must be assumed by the City to satisfy the requirements for MOUs as set forth at 35 Ill. Adm. Code 742.1015(i), and (b) require the Illinois EPA to provide the City with copies of all "No Further Remediation" letters or determinations that the Illinois EPA issues for sites located within the City of Chicago to enable the City to maintain a registry of sites pursuant to 35 Ill. Adm. Code 742.1015(i)(5).

II. DECLARATIONS AND ASSUMPTION OF RESPONSIBILITY

- A. In order to ensure the long-term integrity of the Potable Water Supply Well Ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the Potable Water Supply Well Ordinance is effectively managed, the City hereby assumes the following responsibilities pursuant to 35 Ill. Adm. Code 742.1015(i):

1. The City will notify the Illinois EPA Bureau of Land of any changes to or requests for variance from the Potable Water Supply Well Ordinance at least 30 days prior to the date the local government is scheduled to take action on the proposed change or request (35 Ill. Adm. Code 742.1015(i)(4));
2. The City will maintain a registry of all sites within its corporate limits that have received "No Further Remediation" determinations from the Illinois EPA pursuant to specific programs (35 Ill. Adm. Code 742.1015(i)(5));
3. If the City determines to install a new potable water supply well(s), the City will review the registry of sites established under paragraph II.A.2. prior to siting such potable water supply well(s) within the area covered by the Potable Water Supply Well Ordinance, pursuant to 35 Ill. Adm. Code 742.1015(i)(6)(A);
4. If the City determines to install a new potable water supply well(s), the City will determine whether the potential source of potable water has been or may be affected by contamination left in place at the sites tracked and reviewed under paragraphs II.A.2. and 3. (35 Ill. Adm. Code 742.1015(i)(6)(B)); and
5. If the City determines to install a new potable water supply well(s), the City will take action as necessary to ensure that the potential source of potable water is protected from contamination or treated before it is used as a potable water supply (35 Ill. Adm. Code 742.1015(i)(6)(C));
6. If the City enters into intergovernmental agreements under Section 11-8-390 of the Municipal Code of Chicago to allow other units of local government to install new potable water supply well(s) within the corporate limits of the City, the City will require compliance with the procedures set forth in paragraphs II.A.3., 4., and 5. as a part of such agreements.
7. Notification under paragraph II.A.1. above, or other communications concerning this MOU directed to the Illinois EPA, shall be addressed to:

Manager, Division of Remediation Management
Bureau of Land
Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, IL 62794-9276

- B. In order to ensure the long-term integrity of the Potable Water Supply Well Ordinance as an environmental institutional control and that risk to human health and the environment from contamination left in place in reliance on the Potable Water Supply Well Ordinance or other specific programs can be effectively managed, the Illinois EPA hereby assumes

the following responsibilities:

1. The Illinois EPA will provide the City with copies of all "No Further Remediation" letters or determinations that it issues pursuant to 35 Ill. Adm. Code 742, and other specific programs, for sites located within the boundaries of the City at the time said letters or determinations are provided to remediation applicants.
2. Copies of "No Further Remediation" letters or determinations provided to the City pursuant to paragraph II.B.1. above, or other communications concerning this MOU directed to the City, shall be addressed to:

Commissioner
Chicago Department of Environment
25th Floor
30 North LaSalle Street
Chicago, IL 60602-2575

III. SUPPORTING DOCUMENTATION

The following documentation is required by 35 Ill. Adm. Code 742.1015(i) and is attached to this MOU:

- A. Attachment A: A copy of the Potable Water Supply Well Ordinance certified by the city clerk or other official as the current, controlling law (35 Ill. Adm. Code 742.1015(i)(3)) and a statement of the authority of the City to enter into the MOU (35 Ill. Adm. Code 742.1015(i)(1)).;
- B. Attachment B: Identification of the legal boundaries within which the Potable Water Supply Well Ordinance is applicable (35 Ill. Adm. Code 742.1015(i)(2)); and

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IL EPA*DIV LEGAL*CHURCHL

FAX NO. 2177829807

P.06

IN WITNESS WHEREOF, the lawful representatives of the parties have caused this MOU to be signed as follows:

FOR: The City of Chicago, Illinois

BY:

Ray L. Porter
Commissioner
Department of Environment
City of Chicago

DATE:

July 1, 1997

FOR: Illinois Environmental Protection Agency

BY:

Gary P. King
(Name and title of signatory)
Division of Remediation Management
Bureau of Land

DATE:

July 3, 1997

Version 6/27/97

JUL-10-97 THU 03:38 PM 1L EPA*DIV LEGAL*CHURCHL FAX NO. 2177829807

P. 07

CITY CLERK'S OFFICE — CITY OF CHICAGO

FORM CC-424 3/84-95

Be It Ordained by the City Council of the City of Chicago:

SECTION 1. Chapter 11-8 of the Municipal Code of Chicago is hereby amended by adding a new Section 11-8-385 and by amending Section 11-8-390 by inserting the language in italics, as follows:

11-8-385 Potable Water Defined.

Potable water is any water used for human consumption, including, but not limited to water used for drinking, bathing, washing dishes, preparing foods and watering gardens in which produce intended for human consumption is grown.

11-8-390 Prohibited Use Of Secondary Water; Prohibited Installation Of New Potable Water Supply Wells.

No secondary water shall overflow into or be discharged into any surge tank, storage tank, or reservoir, or shall in any way be piped or conveyed into the water supply system of any building, structure, or premises to become a part of or be mixed with the fresh water supply from the mains of the Chicago Waterworks System either inside of the premises or in the water service pipe. Secondary water shall not be piped to or used in any plumbing fixture, or for cooling crushers, rollers, or mixers where foods, candies, liquids or materials are manufactured for human or animal consumption. No connection, tap, or opening shall be made in a water distribution system other than an approved water distribution system which will permit such water being used for drinking.

Wherever the fire-protective equipment in any building, structure or premises has service from the Chicago Waterworks System, no pipe or other conduit which conveys secondary water shall be cross-connected to the fire-protective equipment. All fire-protective equipment connected to the Chicago Waterworks System shall be constructed in such manner that

EXHIBIT

A

JUL-10-97 THU 03:38 PM

IL EPA*DIV LEGAL*CHURCHL

FAX NO. 2177829807

P.08

all tanks, pipes, pumps, surge tanks, and fire hydrants can be thoroughly drained, flushed and cleaned by the owners of such equipment and premises and there shall be no direct connections from the tanks, pipes and other equipment to any drainage pipes or sewers. *No groundwater well, cistern or other groundwater collection device installed after the effective date of this amendatory ordinance may be used to supply any potable water supply system, except at points of withdrawal by the City of Chicago or by units of local government pursuant to intergovernmental agreement with the City of Chicago.*

SECTION 2. Section 2-30-030 of the Municipal Code of Chicago is hereby amended by deleting the language in brackets and inserting the language in italics, as follows:

2-30-030 Commissioner -- Powers And Duties Designated.

The commissioner of the environment shall have the following powers and duties:

* * * * *

(21) To enter into grant agreements, cooperation agreements and other agreements or contracts with governmental entities, private business and civic and community groups necessary to implement the Green Streets Program and other urban forestry, beautification and environmental enhancement programs; *and agreements to implement the State of Illinois Site Remediation Program;*

SECTION 3. This ordinance shall be in full force and effect from and after its passage and approval.

JUL-10-97 THU 03:38 PM

IL EPA*DIV LEGAL*CHURCHL

FAX NO. 2177829807

P. 09

STATE OF ILLINOIS, ss.
County of Cook.

I, JAMES J. LASKE City Clerk of the City of Chicago in the County of Cook and State of Illinois, DO HEREBY CERTIFY that the annexed and foregoing is a true and correct copy of that certain ordinance now on file in my office an ordinance amending Title 11,

Chapter 8 and Title 2, Chapter 30 of the Municipal Code of Chicago by
establishment of definition of potable water, regulation of potable
water supply system and empowerment of Commissioner of Environment
for implementation of State of Illinois Site Remediation Program.

I DO FURTHER CERTIFY that the said ordinance was passed by the City Council of the said City of Chicago on the fourteenth (14th) day of May, A. D. 1997 and deposited in my office on the fourteenth (14th) day of May, A. D. 1997.

I DO FURTHER CERTIFY that the vote on the question of the passage of the said ordinance by the said City Council was taken by yets and noys and recorded in the Journal of the Proceedings of the said City Council, and that the result of said vote so taken was as follows, to wit:

Yeas 47 Nays None

I DO FURTHER CERTIFY that the said ordinance was delivered to the Mayor of the said City of Chicago after the passage thereof by the said City Council, without delay, by the City Clerk of the said City of Chicago, and that the said Mayor failed to return the said ordinance to the said City Council with his written objections thereto at the next regular meeting of the said City Council occurring not less than five days after the passage of the said ordinance.

I DO FURTHER CERTIFY that the original, of which the foregoing is a true copy, is entrusted to my care for safe keeping, and that I am the lawful keeper of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the City of Chicago aforesaid, as the said City, in the County and State aforesaid, this twenty-seventh (27th) day of June, A. D. 1997

[L. S.]

James J. Laske
JAMES J. LASKE, City Clerk.

JUL-10-97 THU 03:40 PM IL EPA*DIV LEGAL*CHURCHL FAX NO. 2177829807

P.10



City of Chicago
Richard M. Daley, Mayor

Department of Environment

Henry L. Henderson
Commissioner

Twelfth-Fifth Floor
30 North LaSalle Street
Chicago, Illinois 60602-2575
(312) 744-7806 (Voice)
(312) 744-6453 (FAX)
(312) 744-3586 (TTY)
<http://www.ci.chi.il.us>

July 1, 1997

Mr. Gary P. King
Manager, Division of Remediation Management
Bureau of Land
Illinois Environmental Protection Agency
1001 N. Grand Avenue, East
Springfield, IL 62702

RECEIVED

JUL 03 1997

I.E.P.A. / B.O.L.

Re: Chicago Ordinance No. 097990

Dear Mr. King:

Pursuant to 35 Ill. Adm. Code 742.1015(i)(2), Section 11-8-385 and 11-8-390 of the Municipal Code of Chicago, as amended by Ordinance No. 097990, apply to all areas within the corporate limits of the City of Chicago.

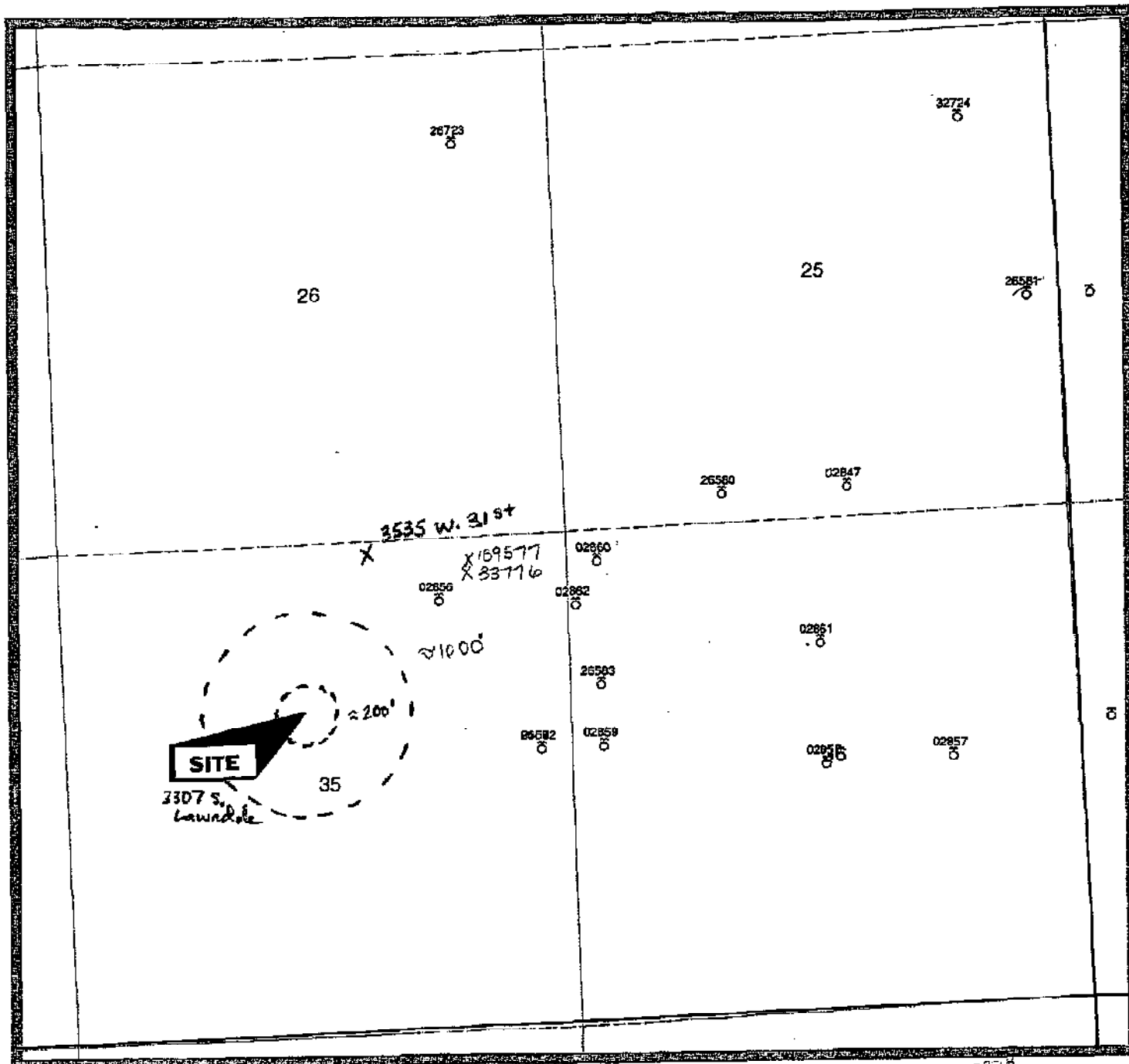
Sincerely,


Henry L. Henderson
Commissioner

cc: Mort Ames
Asst. Corp. Counsel



Map Area: 39N-13E-34 m3 to 39N-14E-19 m3



Explanation

• Oil	☼ Gas Injection	☒ Junked
✱ Oil & Gas	☼ Gas Storage	◊ Temporarily Abandoned
☼ Gas	☼ Salt Water Disposal	☼ Observation
✱ D&A - Oil Show	☼ Water Injection	☼ Other Injection
✱ D&A - Gas Show	☼ Water Supply	☼ Confidential
✱ D&A - Oil & Gas Show	○ Permit	☼ Other Well Type
✱ D&A	○ Water	+ Status Unknown

through any symbol indicates well is currently plugged



0 1552 3104 ft

Illinois State Geological Survey

QuESToR: Custom Map

Date: 07-JUL-03 Scale: 1:18624

Displayed data is based upon information supplied to the Illinois State Geological Survey (ISGS) and are not field verified. The ISGS does not guarantee the validity, accuracy or completeness of these data.

07-JUL-03

QuESToR Data Extraction

DB: volcano

Non Oil and Gas - Wells

120312658100 Chicago Pub. Works Dept. 25-39N-13E
Cook 26Th & Wstrn Up 26W2
Status: ENG NE NE SE Elev: 599GL
permit: 0 permit date: comp. date: 04/01/69
Lambert X: 3492025 Lambert Y: 3211956 td: 43
producing formation: td formation:
latitude: 41.843799 longitude: 87.686430

120312658000 Chicago Pub. Works Dept. 25-39N-13E
Cook Central Htng Pnt Mhp6
Status: ENG SW SE SW Elev: 592GL
permit: 0 permit date: comp. date: 01/01/55
Lambert X: 3488795 Lambert Y: 3209844 td: 50
producing formation: td formation:
latitude: 41.838157 longitude: 87.698486

120310284700 Chicago Pub. Works Dept. 25-39N-13E
Cook Chgo Pub Works Dept
Status: ENG SW SW SE Elev: 592GL
permit: 0 permit date: comp. date: 01/01/13
Lambert X: 3490114 Lambert Y: 3209903 td: 55
producing formation: td formation:
latitude: 41.838247 longitude: 87.693622

120313272400 25-39N-13E
Cook Ideal Roller & Mfg. Co.
Status: WATER SW NE NE Elev: 0
permit: permit date: comp. date:
Lambert X: 3491296 Lambert Y: 3213892 td: 1120
producing formation: td formation:
latitude: 41.849174 longitude: 87.688974
Water from at depth 0 to 0 ft.
Screen: Diam. in. Length: 0 ft. Slot:
Casing and Liner Pipe -
Diam. (in.) Kind and Weight From(ft) To(ft)
Size hole below casing: in.
Static level 0 ft. below casing top which is 0 ft. above grnd level.
Pumping level 0 ft. when pumping at 0 gpm for 0 hours.

120312672300 26-39N-13E
Cook Farragut High School B-1
Status: ENG SW NE NE Elev: 593GL
permit: 0 permit date: comp. date: 07/01/28
Lambert X: 3486006 Lambert Y: 3213684 td: 15
producing formation: td formation:
latitude: 41.848890 longitude: 87.708484

120310167200 35-39N-13E
Cook Metro Sanitary Dist
Status: ENG SE SE NE Elev: 598
permit: 0 permit date: comp. date: 08/01/71
Lambert X: 3486899 Lambert Y: 3207097 td: 856
producing formation: td formation:
latitude: 41.830690 longitude: 87.705672
Water from at depth 0 to 0 ft.
Screen: Diam. in. Length: 0 ft. Slot:
Casing and Liner Pipe -
Diam. (in.) Kind and Weight From(ft) To(ft)
Size hole below casing: in.
Static level 0 ft. below casing top which is 0 ft. above grnd level.

Pumping level 0 ft. when pumping at 0 gpm for 0 hours.

120310285600 Smythe & Weinstein 35-39N-13E
Cook Liquid Carbonic
Status: WATER N E SWc NW NE NE Elev: 0
permit: 0 permit date: comp. date: 01/01/35
Lambert X: 3485851 Lambert Y: 3208725 td: 1558
producing formation: td formation:
latitude: 41.835233 longitude: 87.709415

120312658200 Chicago Pub. Works Dept. 35-39N-13E
Cook S Kedzie Av Brdg Kd-8
Status: ENG SE SE NE Elev: 600GL
permit: 0 permit date: comp. date: 12/01/65
Lambert X: 3486899 Lambert Y: 3207097 td: 81
producing formation: td formation:
latitude: 41.830690 longitude: 87.705672

120310286100 Chicago Pub. Works Dept. 36-39N-13E
Cook Chgo Pub Wks Dept
Status: ENG N2 Elev: 583GL
permit: 0 permit date: comp. date: 01/01/27
Lambert X: 3489847 Lambert Y: 3208231 td: 33
producing formation: td formation:
latitude: 41.833654 longitude: 87.694728

120310285800 Chicago Pub. Works Dept. 36-39N-13E
Cook Chgo Pub Works Dept
Status: ENG N E SWc NE Elev: 594GL
permit: 0 permit date: comp. date: 01/01/13
Lambert X: 3489899 Lambert Y: 3206901 td: 51
producing formation: td formation:
latitude: 41.829986 longitude: 87.694634

120310285900 Chicago Pub. Works Dept. 36-39N-13E
Cook Chgo Pub Works Dept
Status: ENG SW SW NW Elev: 595GL
permit: 0 permit date: comp. date: 01/01/13
Lambert X: 3487562 Lambert Y: 3207124 td: 67
producing formation: td formation:
latitude: 41.830729 longitude: 87.703228

120310286000 Chicago Pub. Works Dept. 36-39N-13E
Cook Chgo Pub Works Dept
Status: ENG NW NW NW Elev: 593GL
permit: 0 permit date: comp. date: 01/01/13
Lambert X: 3487498 Lambert Y: 3209123 td: 70
producing formation: td formation:
latitude: 41.836241 longitude: 87.703318

120310285700 Chicago Pub. Works Dept. 36-39N-13E
Cook Chgo Pub Works Dept
Status: ENG E2 Elev: 594GL
permit: 0 permit date: comp. date: 01/01/13
Lambert X: 3491228 Lambert Y: 3206964 td: 42
producing formation: td formation:
latitude: 41.830087 longitude: 87.689733

120312658300 Chicago Pub. Works Dept. 36-39N-13E
Cook S Kedzie Av Brdg Kd-1
Status: ENG NW SW NW Elev: 0
permit: 0 permit date: comp. date: 12/01/65

Lambert X: 3487541 Lambert Y: 3207791 td: 62
 producing formation: td formation:
 latitude: 41.832568 longitude: 87.703256

120310286200 Layne Bowler Co 36-39N-13E
 Cook Waterway Paper Prod
 Status: WATER 800 NL 100 WL Elev: 592TM
 permit: 0 permit date: comp. date: 01/01/28
 Lambert X: 3487282 Lambert Y: 3208647 td: 1290
 producing formation: td formation:
 latitude: 41.834941 longitude: 87.704148
 Water from at depth 0 to 0 ft.
 Screen: Diam. in. Length: 0 ft. Slot:
 Casing and Liner Pipe -
 Diam. (in.) Kind and Weight From(ft) To(ft)
 Size hole below casing: in.
 Static level 0 ft. below casing top which is 0 ft. above grnd level.
 Pumping level 0 ft. when pumping at 0 gpm for 0 hours.

120312666400 Chicago Pub. Works Dept. 30-39N-14E
 Cook 26Th & Wstrn Upass 26W6
 Status: ENG NW NW SW Elev: 588GL
 permit: 0 permit date: comp. date: 04/01/69
 Lambert X: 3492687 Lambert Y: 3211984 td: 25
 producing formation: td formation:
 latitude: 41.843840 longitude: 87.683988

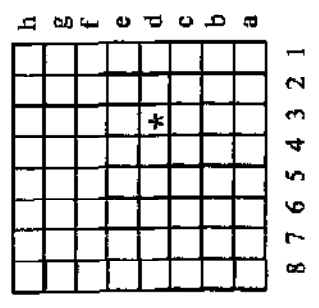
120310322100 Chicago Pub. Works Dept. 31-39N-14E
 Cook Chgo Pub Works Dept
 Status: ENG SW SW NW Elev: 592GL
 permit: 0 permit date: comp. date: 01/01/13
 Lambert X: 3492871 Lambert Y: 3207371 td: 42
 producing formation: td formation:
 latitude: 41.831069 longitude: 87.683651

Monday, July 7, 2003

County: COOK
Township: 39n
Range: 13e
Sections: 25,26,35,36
Records found: 8
Questions: Contact the Illinois State Water Survey's Ground Water Division @217-333-9043
Publication: Please cite the Illinois State Water Survey's Private Well Database in all publications based wholly or partially on this information.

Note: The data in the Private Well Database is a listing of non-municipal wells which are known to the Illinois State Water Survey(ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms from the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those submitting the forms. Information in the Private Well Database has not been verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.



Location of a 10-acre-plot within a section:

The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

Monday, July 7, 2003

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DATE DRILLED	DEPTH	RECORD TYPE	USE	WELL TYPE	AQUIFER TYPE	STAT LVL	PUMP LVL	PUMP GPM
33769	031	39N	13E	25		INTERNATIONAL HARVESTER		00/00/1912	1660	O	IC		BR			
33766	031	39N	13E	25	2G	IDEAL ROLLER & MFG CO		00/00/1936	1148	CO	IC		BR			
33788	031	39N	13E	26		PULSEN PRODUCTS CO		00/00/1905	1700	CO	IC		BR			
33777	031	39N	13E	35		LIQUID CARBONIC CORP (POWER PL	GEIGER	00/00/1912	1650	OGC	IC		BR			
189577	031	39N	13E	35	2H	LIQUID CARBONIC CORPORATION		06/29/1935	1700	C	IC	--	-			705
33776	031	39N	13E	35	2H	LIQUID CARBONIC CORP (GAS PLAN	GEIGER	00/00/1912	1512	COX	IC		BR			
33756	031	39N	13E	36		DICKINSON SEED CO		00/00/1914		O	IC					
33772	031	39N	13E	36		INTERNATIONAL PAPER/WATERWAY P	LAYNE BOWLER	00/00/1927	1290	OG	IC		BR			
33773	031	39N	13E	36		INTERNATIONAL PAPER/WATERWAY P	LAYNE-WESTERN	00/00/1944	1551	RGI	IC		BR			

Monday, July 7, 2003

County: COOK

Township: 39n

Range: 13e

Sections: 25,26,35,36

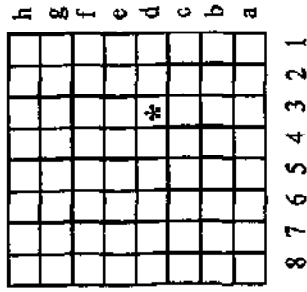
Records found: 0

Questions: Contact the Illinois State Water Survey's Ground Water Division @217-333-9043

Publication: Please cite the Illinois State Water Survey's PICS (Public-Industrial-Commercial) Database in all publications based wholly or partially on this information.

Note: The data in the PICS Database is a listing of municipal and commercial wells which are known to the Illinois State Water Survey(ISWS). This information was initially entered from public water supply data and supplemented with the Illinois Water Inventory Project data. This database is updated as additional information is received and verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.



Location of a 10-acre-plot within a section:

The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

09/18/2003 09:33 FAX 217 557 1188

IDPH LEAD ABATEMENT PRGM

0002

SEP-05-2003 15:23 FROM PIONEER E&E SERVICES, INC TO

12175571188 P.01



RECEIVED

SEP 05 2003

DIVISION OF
ENVIRONMENTAL HEALTH

September 5, 2003

Illinois Department of Public Health
535 West Jefferson Street
Springfield, Illinois 62761
217-782-4977
217-557-1188 Fax:
ATTN: Jamie

RE: FOIA/Water Well Search
LPC#0316005194 - Cook County
Former City of Chicago, Department of Environment Site
3535 West 31st Street
Chicago, Illinois
Pioneer Project #02695C

Dear Jamie:

As we have discussed, Pioneer is assisting the property owner referenced above in obtaining site closure through the IEPA's Site Remediation Program. Pursuant to the requirements of Section 740.435(b)(2)(C)(i), Pioneer is requesting information regarding the locations of any water wells within the area of the site. Given the site's location, Pioneer specifically would request information for those wells in Township 39 North, Range 13 East, Sections 26 and 35. Please provide (at a minimum) well locations and total well depths via mail to my attention, care of Pioneer Engineering & Environmental. Please contact me at 312-587-1021 if you require additional information.

Sincerely,
PIONEER ENGINEERING & ENVIRONMENTAL SERVICES, INC.

Joseph C. Kelly, P.E.
Senior Project Manager

No wells listed
9/18/03



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276, 217-782-3397
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601, 312-814-6026

217/782-1020

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

9/12/2003

Joseph Kelly
Pioneer Engineering & Environmental
700 N. Sacramento Blvd., Suite 101
Chicago, IL 60612-

Re: Request Regarding the Location of community water supply wells in Cook County, Illinois.
(FOIA NO: 2003P0771)

Dear Joseph Kelly:

This letter responds to your written inquiry received in Public Water Supplies on 9/5/2003 regarding your project area located in Section 26 and 35, T39N, R13E.

You requested information pertaining to the nearest community water supply well. Based upon the information provided, the project area appears to be located outside 2,500 feet from a community water supply well.

Effective September 1st, 2001, the Pleasant Valley Public Water District, in Peoria County, is the first and only regulated recharge area to designate a defined area with specific regulations in place for the area contributing groundwater to its public water supply wells pursuant to section 17.3 of the Illinois Environmental Protection Act (Act). Further, Class III Special Resource Groundwaters has been listed by the Illinois Pollution Control Board with respect to the contribution to Parker Fen in McHenry County.

The Illinois Department of Public Health should be contacted at (217) 782-5830 in regards to the regulations concerning private, semi-private or non-community public water supply wells and the Illinois State Water Survey should be contacted at (217) 333-9043 in regards to the location of these wells. I trust that this meets your needs. Should you require any further information, please feel free to contact me at the above referenced number.

Sincerely,

Janet Christer
FOIA Coordinator, Manager's Office
Division of Public Water Supply
Bureau of Water

cc: File

ROCKFORD - 4302 North Main Street, Rockford, IL 61103 - (815) 987-7760 • DES PLAINES - 9511 W. Harrison St., Des Plaines, IL 60016 - (847) 294-4000
ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 • PEORIA - 5415 N. University St., Peoria, IL 61614 - (309) 693-5463
BUREAU OF LAND - PEORIA - 7620 N. University St., Peoria, IL 61614 - (309) 693-5462 • CHAMPAIGN - 2125 South First Street, Champaign, IL 61820 - (217) 278-5800
SPRINGFIELD - 4500 S. Sixth Street Rd., Springfield, IL 62706 - (217) 786-6892 • COLLINSVILLE - 2009 Mall Street, Collinsville, IL 62234 - (618) 346-5120
MARION - 2309 W. Main St., Suite 116, Marion, IL 62959 - (618) 993-7200